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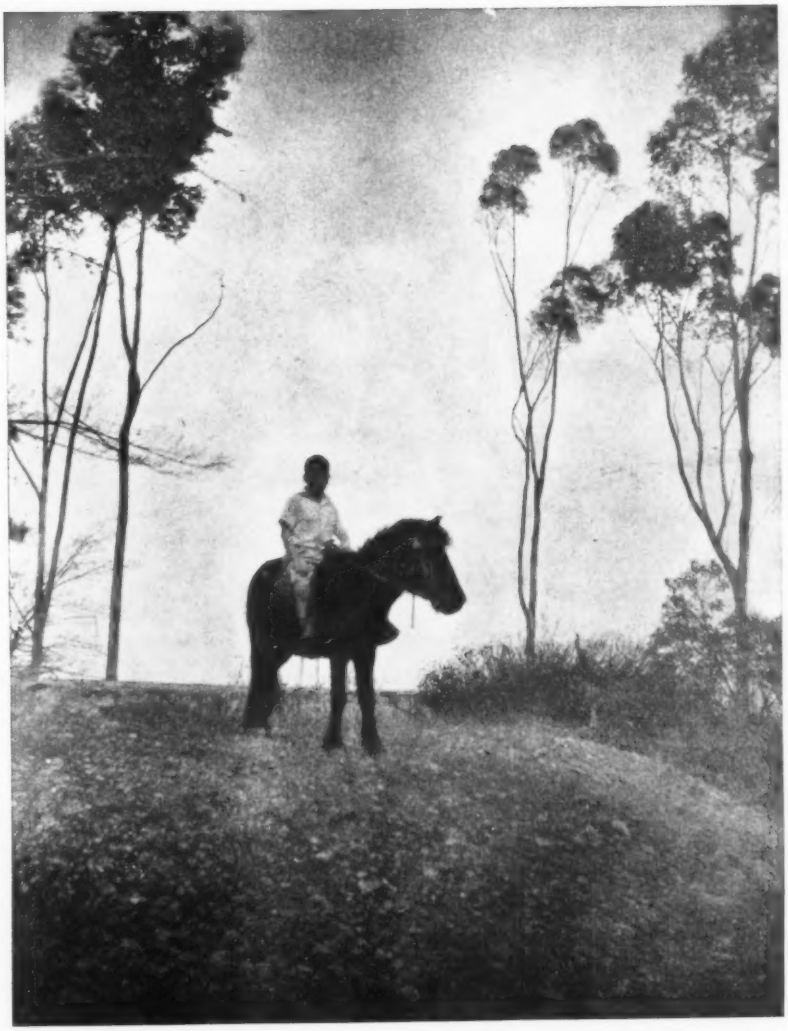
PHOTO-ERA MAGAZINE

The American Journal of Photography



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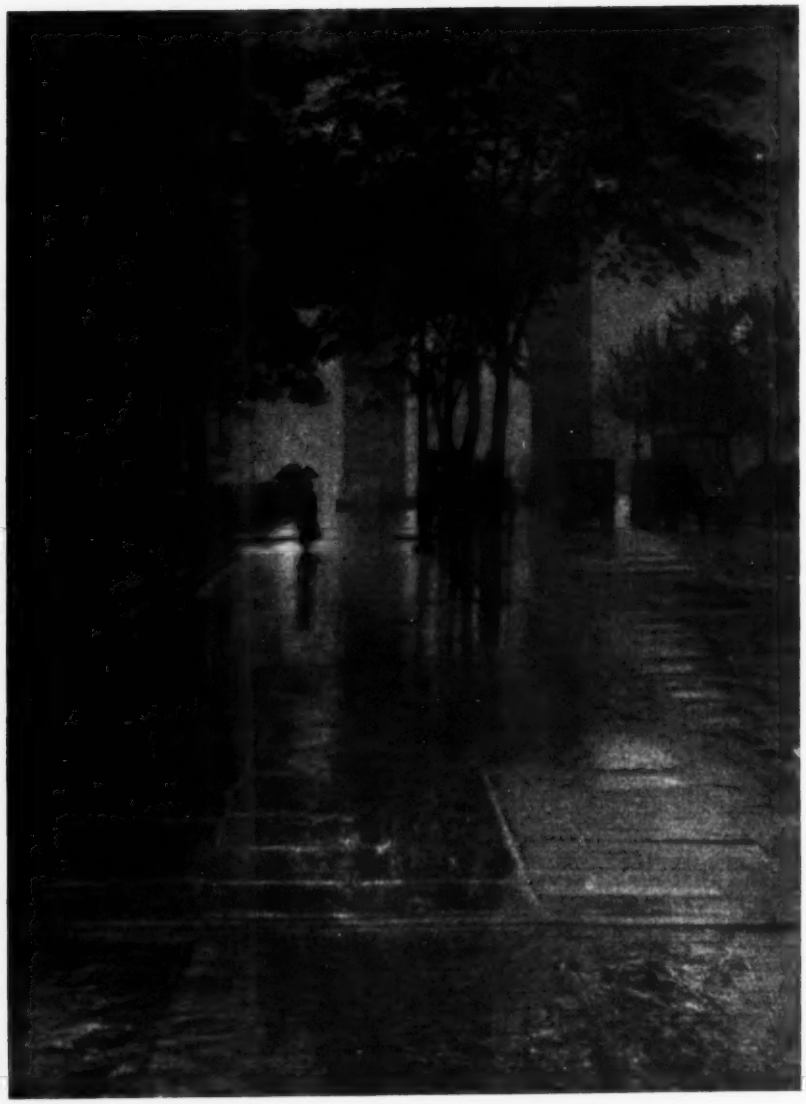

FIFTH AVENUE ON A WET DAY
HAMILTON REVELLE

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On Photographing Homes

W. X. KINCHELOE

ARCHITECTURAL photography is one thing, the photography of trees and flowers another, and the photographing of children and their pets is something else; yet, all three must be mastered; for the combined knowledge is used to photograph homes, and a home is all of these, and more. An order from a builder to photograph a house that he has just completed is an order to make the best technical picture you know how to make. Here is where the anastigmat lens with a small stop comes into its own; where a knowledge of perspective and vanishing points is as necessary as a thorough acquaintance with plate and developer. That house was built plank by plank, or brick by brick; and the builder wishes a picture which will show his work. He wants to be able to show some prospective client the details of the construction of that house, and these details are what he wishes you to put into his picture. Of course he desires the picture to show his work to the best advantage, and you should incorporate as much of the atmosphere or character of the building as can be done without sacrificing the rendering of detail. For work of this kind, the soft-focus lens should most certainly not be used.

It is always best to have a talk with your builder-client before beginning to photograph a house for him. In the first place, by knowing him, and by drawing him into conversation about his work, you can discover more fully just what he wants done; and in the second place, he will be almost sure to tell you about some certain details of each job that he wishes to appear to advantage. However, the best plan of all, from the business-point of view, is to take him with you. He will see then the impossibility of showing the whole house in the one picture ordered; and, if a little tact is exercised, he will probably order several photographs. There is frequently some built-in feature inside the house that he designed himself, and of which he is very proud. Do not be bored when he begins to tell you about it; be a sympathetic listener, and take your camera with you when he asks you if you would like to go in to see it.

An architect is not employed usually on the small houses, as the builder usually works from some of the plans which are to be had in book-form, or in some of the magazines. An order from an architect, then, usually means that the job is a large one; and he should always be consulted before undertaking more than a mere reconnaissance of the building. An architect, you must remember, is also an artist. He must have the creative instinct, and imagination, as well as the ability to figure strains and stresses. The picture which will please him is the one which will convey the impression of the building that he has visualised in his own mind. Although he wishes good rendering of detail, he also desires as much "atmosphere" as can be put into a picture of a new house. The viewpoint must be very carefully chosen, and the lines of the building rendered as faithfully as possible.

He, or some one from his office, will probably wish to go out with you; for among his blue prints he also has a colored drawing of that building, and he will wish a photograph made to give the same effect. Do not, in your efforts to do this, and to render the details well, lose sight of the fact that the picture must be able to stand on its own feet, that a careful study of the building must be made by you, and that the light must be right at the time the exposure is made in order to show convincingly the atmosphere of the home-to-be. Orthochromatic plates and a filter should be used for this picture, especially if it is possible to make the exposure at a time when there is a good sky-and-cloud effect. That, and having all the rubbish around the new house cleaned up, will do more than anything else to give the home-effect to a new house. To

THE NEW HOUSE W. X. KINCHELOE

me, personally, these two phases of the work are so much skilled labor which I am occasionally asked to perform. I cannot enter into the work, heart and soul, until the house has become a home; for not until then does it possess those qualities which appeal to the heart and imagination, and draw out in me the desire to express the feeling and sentiment of the place, just as I would feel the urge to visualise and make permanent my impressions of a beautiful landscape.

In an American magazine, some months ago, there was an article by a man after my own heart. His subject was: "It takes a Lot of Living in a House to Make it a Home." It should be read by every married couple, or, for that matter, by every couple that ever expects to get married, and by every photographer who photographs homes. If he has not himself experienced the joys and sorrows which will be encountered during this period of metamorphosis, he will have an opportunity to look straight into the heart of another man who has experienced them, and thus see some of the things which must be expressed in photographing homes.

Photography, by some, is called a mechanical process. Yet I know, and you know, that a photographer who has used a camera until the operation of all its adjustments has become second nature, can see in a scene just what you see in it, and can impress upon a plate the same image that has formed in your mind. We also know that some one else can take that same camera, and a plate just like the one you used, and it will not form the same picture for him. This brings us, then, to where we will state that the equipment necessary to photograph homes is a camera, tripod, and the greatest possible amount of understanding and human sympathy, so that we can see and understand, and, understanding, express in our picture those little touches, here and there, which will tell the story of that home and the lives of its owners.

In photographing houses for the builder and the architect, a view-camera is really necessary. However, if one wishes to undertake work of that nature, and has a plate-camera such as the Cycle Graphic, Premo No. 9, or other camera of that type, fitted with a reversible back, swing-back and rising-and-falling front, good work can be done. The negatives can be enlarged to the 8 x 10-inch size, which is considered standard. If much work is to be done, especially where large buildings are to be photographed, a view-camera, on account of its staunch, rigid construction, the ease with which its adjustments can be manipulated and its adaptability without change to lenses of all practical focal lengths, is indispensable. The tripod, also, should be strong and rigid.

The question of lenses has likewise to be considered; and I am not going any further with advice than to say that the lenses should be capable of producing sharp definition, have good covering-power, and be absolutely rectilinear. In some cases, a wide-angle lens will have to be used; and other situations will permit the use of a lens having a focal length equal to the diagonal of the plate. The use of a wide-angle lens does not produce a natural effect in the picture. In confined situations, and in photographing large buildings, it is frequently a case of either using a wide-angle lens or not being able to get the building within the confines of the groundglass; so we use it and maneuver to get the best effect possible. The work will be made much easier if the lens has a wide margin of excess covering-power. This will be especially noticeable in the down-town districts of large cities and towns where traffic and people are constantly moving in the picture-area. If the camera-front has sufficient rising-movement, and the lens sufficient covering-power, the camera can be set up level, and the building correctly placed on the groundglass by raising the front. Then, if the lens is a good one, and gives sharp definitions at large apertures, let us say F/8, an instantaneous exposure can be made which will show all the traffic and thus make a more natural and lifelike picture of the building.

If, with your equipment, this cannot be done, you will have to raise the front first as high as the lens-definition or camera-adjustment will permit, and then tilt the whole camera upward until the building is correctly placed. However, if the exposure were to be made in this position, the resulting negative would give the effect of the building falling forward. Consequently, the swing-back will have to be manipulated until the back is exactly vertical. It will then be found that the building is out of focus. If the top is in focus the bottom will be out of focus, and *vice versa;* therefore, focus on the center, and then close the diaphragm-stop until the definition is good all over the plate. Whereupon will arise the question of exposure. If, with your regular plate, the correct exposure at F/8 would have been 1/25 of a second, at F/32 it will be 2/3 of a second or one second, as that is usually the nearest shutter-speed. In some places you can find a quiet interval, of one or two seconds, in which to make the exposure. In others, you cannot do so. In such circumstances your only course of procedure, if you do not want blurred images all over the sidewalk and street, is to make the exposure so long that objects in motion will not appear at all. To do this, use the smallest stop in the shutter and a plate slow enough to increase the correct exposure to over ten seconds. Your

HOME OF AN ELDERLY WORKINGMAN — W. X. KINCHELOE

only care, then, will be to see that no one dressed in white walks slowly where the direct sunlight strikes him; for he might show a blurred image. Also see to it that there are no dense masses of people on the sidewalks, unless the exposure can be made very long. All other moving objects in view will not be there when the negative is developed and printed.

It is possible to make good pictures of tall buildings with small cameras, which do not have these adjustments, by simply tilting the camera upward until the building is placed correctly in the finder or on the groundglass. A contact-print from such a negative will show the building apparently on the point of falling over on the observer; but, by having the easel on which the bromide paper is fastened pivoted at the center so that it can be tilted forward or backward like a mirror, the lines of the building can be straightened and corrected in the enlargement. This will require careful focusing, and the use of a small diaphragm-stop, to give good definition over the whole picture, exactly as when using the swing-back of a view-camera. This is the method I follow when I am requested to make a picture of a house and nothing is available but a kodak or reflecting-camera. The same result can be obtained also when an enlarging-lantern is used—and no swinging-easel is available—simply by tilting the lantern. This covers the elementary technique of photographing buildings from the photographer's point of view, excepting a little discussion on view-point and lighting in making the pictures.

It must be remembered that in photographing a house, we are endeavoring to represent on a small, flat piece of paper a subject that has four sides, a top and bottom, and, perhaps, other features of utility and ornamentation. If a light of equal brightness were falling on every part of that building, it could not be done. If, however, as is the case, the light comes from one point, the sun, the parts of the building that receive the direct rays from the sun will be brilliantly illuminated; but the parts which do not receive the direct sunlight will be made visible by the reflected light which, although bright, is not nearly so bright as the direct sunlight, and this is called the shadow.

Man, through centuries of inherited instincts and through his own observations from the period of dawning intelligence, has learned to determine the shape of objects at a glance, by noticing the play of light and shade over them. He knows, by the modulations of the light, whether he is looking at a flat or cylindrical object. Although he cannot tell with one eye, from a viewpoint directly opposite the center of the front of a cube, whether the object is flat or cubical, let him move his viewpoint until he can also see one side, and his mind pictures at once the shape of the object; for though he can see only the front and one side, his mind completes the picture for him.

In photographing buildings, let us remember that the camera has only one eye; so, if the picture is to form an image for us which we will recognise instinctively, and which will suggest immediately the form of the house before it, we must place the camera to show at least part of one side as well as the front, and the light should be from such a direction that the parts of the building will suggest their shape by the play of light and shade over their surfaces.

In photographing homes, the scientific side of architectural photography, although it cannot be lost sight of, should be subordinated to obtaining the home-atmosphere in the picture. The correct viewpoint from which to photograph a small home is the one which best shows the house and the touches added here and there to house and grounds by its owners. In these touches may be found an expression of individuality and love of the home. In the case, let us say, of a young married couple who were fortunate enough to begin life together in a home of their own, who, besides themselves or others whose feet have passed over the same path, know what that home means to them? It is not just four walls and a roof—it falls short only of their dreams of Heaven. Perhaps, if it is a new house, they planned it together during the time of their courtship, and while they were saving the money to make it possible. Even now, although it stands as the fulfillment of their dreams, and the place where all their love and interests and ambitions are centered, it also represents self-denial and sacrifice. Such a house, be it large or small, be it freshly painted or standing in its naked boards until the owners can paint it, should be pictured only in a happy vein. The sun should be shining, fleecy, white clouds should be floating in a warm, blue sky; and these with the grass and flowers should be shown to give an effect of warmth and happiness.

To one who, like myself, has been so fortunate as to have the right kind of a mother, the word "home" conveys a meaning almost sacred. In addition to its being a place where all our creature-comforts are looked after, it sometimes represents a place which expresses not only the personality of our own immediate family, but that of other generations who have lived there and have passed on. Above all, as home, it stands for a place in which we are secure from all the strife and trouble of the outside world;

THE ARISTOCRATIC MANSION

W. X. KINCHELOE

THE WELL-KEPT WALK W. X. KINCHELOE

where, even as we pass over its threshold, we can feel its benediction of peace and calm. It is a place of simple, quiet living, of calm, deep thinking, where I was taught that a disappointment or a failure, instead of being a calamity, was only to teach me to prepare myself more thoroughly and to try again more earnestly. All these things, and many more, are my impressions of home, and that greatest of God's blessings—the mother who makes it. That is why, in photographing other homes, I can see and feel something else besides a fence, a few trees, flowers and a house.

I have made pictures of some fine homes that were owned and lived in by people who were the best of the old Southern aristocracy; and, in addition, were able, financially, to have the best of houses and grounds. In these, I have found the home-atmosphere, and the personality of the owners expressed, just as it might be in a cosey workman's cottage. I have also photographed houses and grounds where my imagination could find nothing to seize upon. The grounds may have been laid out by the best of landscape-gardeners, but they lacked something; and photographing them was a case of simply selecting the viewpoints, making the exposures when the light was right, and using the plates and filters that would best record them.

At other times, when photographing some simple home, I have lingered long and lovingly over my task; for having lived as I have, and as long as I have, I was able to see and feel much of the lives of these people through their homes. Some of these things I wanted to get into my picture; at any rate, I wanted to give them my best, for in photographing a real home one's best falls far short of being good enough.

Of course, the technical side of this work can be done best with a view-camera, and the pro-

fessional photographer will probably use such an equipment. Lacking this, the amateur can do good work in photographing homes with almost any kind of camera, as the faulty lines of the negative can be corrected in making the enlargement. Any lens which is rectilinear and of good quality can be used, for extremely sharp definition is not desirable. The use of a medium, wide-angle lens will prove advisable sometimes when it is desired to emphasise some features of flowers or foliage in the foreground, as, by this means, they can be made disproportionately large compared with the house.

THE HOME WHICH IS ITS OWNER'S PRIDE — W. X. KINCHELOE

The best work on photographing homes cannot always be done by the professional commercial photographer of the large cities, in the regular course of his daily work. He has the equipment and the technical knowledge; but he lacks the time to study each home and to make the exposures at the time when all nature is aiding him in his effort to express the individuality of that home. The amateur, on the other hand, in photographing some home in his neighborhood, has the advantage of knowing the house and its owners intimately. He knows just what quality of light, and season of the year, will produce the desired effect, and his exposures can be made accordingly.

The materials for negative-making in photographing homes should be those with which the user is most familiar, and with which he can most easily and surely produce the effects he desires. This must be qualified, however, by saying that the plates or films in almost every case should be orthochromatic. To show a bleak, dreary effect in the late Fall, when the sky is heavy and a dull, lead color, as good results can be had with a blue sensitive, or plain plate, as with one which is color corrected. To show snow in sunlight, and not lose all the relative values in the trees and house, an orthochromatic plate or film and filter is necessary. Of course, during the spring- and summer-months, orthochromatic plates or films, and the filters suited to them, must be used if we wish to put into our picture the values of sky, foliage and flowers as our eyes see them. We will still lack a correct rendering of the dark reds; but they are relatively unimportant in most of that work, and as the panchromatic plates, which alone can render the reds, have to be handled and developed in practical darkness, it will be found that we can get the most uniformly satisfactory results with a good orthochromatic plate. My advice would be to experiment until you find the plate which will give just the results you desire; and then, stick to it. Only by being thoroughly familiar with one plate can you learn to use it to make negatives of just the type you desire under all conditions of light, shade and color.

It is possible to express every emotion in photographing a home that can be expressed in a landscape, and several others as well. The home can be photographed in shade, in direct sunlight, or in any variation between. The picture can be in a high key, a low key, or showing the full scale of gradations. The definition can be sharp or diffused; and, finally, the paper itself, by means of tone and texture, can aid greatly to produce the desired result. The song of a bird cannot be photographed or painted, yet the bird-song finds its way into the heart of the artist, and through him it unconsciously finds its way into the picture. So, too, the sentiment that surrounds each home, as it affects the artist, will find its way into his prints.

Photography from the Air

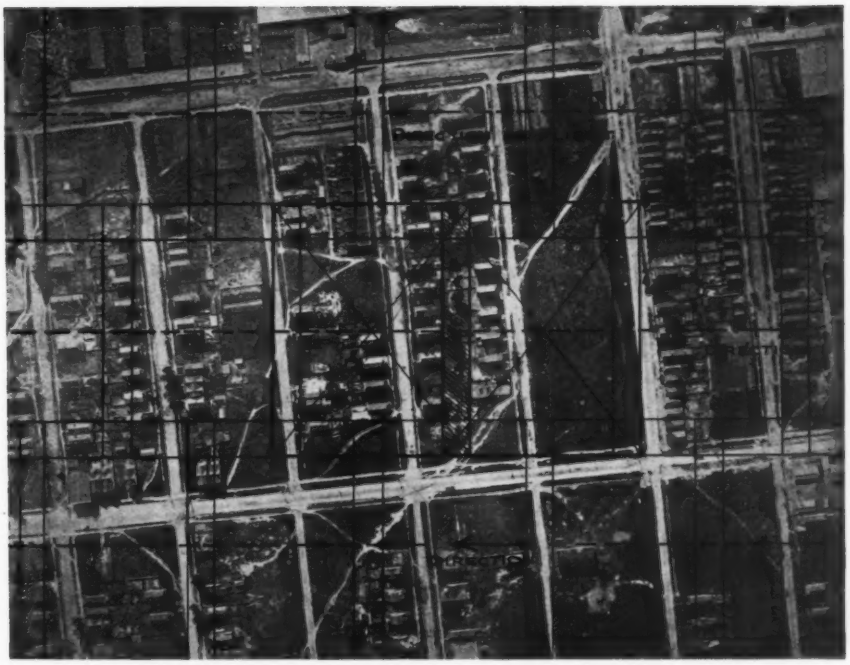
EDWARDS W. DONALDSON

WHEN my brother returned from the U. S. Army service, after being honorably discharged from the Aerial Photographic Section, he had some interesting experiences to relate; and some amusing incidents, too. One of these is worth re-telling. He had passed through the grilling preparatory work in the school at Rochester, New York,—so generously donated by the Eastman Kodak Company,—and had finally risen to the "dizzy" rank of corporal, which included the privilege of flying. Equipped one day with a permit from the officer in charge and a camera, he went to the flying-field, where it was his right to select his own pilot. A number of the aviators were idling away the sunny afternoon between flights. My brother, putting into effect a firm theory of his that a fat man would prove too indolent to do "stunts" with him, selected the most robust-looking one of the group. The pilot, being assured that the trip was not business but merely a "joy-ride," was on his feet with alacrity. They proceeded to the air-plane and the camera was soon bolted into its designated place.

My brother said that he was not nervous; that is, not *very* nervous, and that they were off the ground almost before he realised it. Upon looking over the side of the airplane, he was amazed to see the landscape drifting quietly away in the distance instead of being right beneath the plane, as he had expected. Before embarking, they had arranged a set of signals: when they came over a spot suited for a picture, my brother—in the passenger-seat directly behind the pilot—was to kick smartly beneath the seat in front, for conversation would be impossible. At that signal the pilot was to drop the airplane to the 4000-foot level, best suited to photography from the air.

The airplane mounted higher and higher until the earth became veiled in filmy purple, and the easy motion soothed the passenger so that he lost the last vestige of nervousness. He eased his body into a more comfortable position and rested his feet on a convenient rod that crossed the floor and seemed to have been put there especially for the comfort of passengers. Simultaneously with this act, the earth left its position beneath and rose until it stood directly in front of the rapidly approaching airplane. My brother sat up in his seat, astonished that the dependable old earth should act in such an unseemly manner. He began to wish that the pilot would do something so that they might pass on one side or the other of the landscape. By his frantic tugging at the levers, the officer seemed to be of the same mind. A collision seemed inevitable, when he turned suddenly, seized my brother's legs with pardonable roughness, and jerked his feet away from the "foot-rest." At once, the earth dropped back to its accustomed place below the airplane.

This was the only incident of note in the trip, with the exception of the prearranged signal. It suddenly came to the corporal's mind that he was up there to make pictures and not to enjoy the scenery. His memory on this point was refreshed by some humorous antics on the part of the pilot, which he thought, at first, to be the pilot's efforts to be entertaining; but gradually it dawned upon him that in deaf and dumb language the pilot was saying: "What do you think that camera is, an ornament?" So he kicked smartly on the seat, as instructed, and was again amazed to find himself sitting on air with the airplane trying its best to leave him up in space. Thanks to the straps, which some thoughtful soul had buckled about his waist, he accompanied the plane to the 4,000-foot level and was able to make the necessary exposures. After landing, he proceeded at once to "paint the ship"! To persons who understand the French *mal de mer*, this needs no further explanation. Thus he was duly initiated into the order of those who had been "up."



PLAN OF AERIAL ROUTE — EDWARDS W. DONALDSON

Conditions have changed rapidly within the past few years. The cumbersome and uncertain apparatus which was in use at the time when photography from the air was just becoming appreciated as a factor in warfare has been improved until the modern equipment is rated equal to the best used by "ground" photographers in their branch of the work.

The new type of airplane-camera is a marvel of its kind and has overcome virtually all handicaps. The focal-plane shutter has given way to a high speed between-the-lens shutter which eliminates distortion. With a focal-plane shutter which operates at 1/150 second, the interval that elapses during the time the slit crosses the plate will be about 1/10 second; and, during that time the airplane, flying at 90 miles an hour, will have progressed approximately 16 feet, which is sufficient to cause distortion. It really means that the picture has been made continuously between two viewpoints 16 feet apart. The camera used during the war had only one slit; but this one was variable and could be adjusted to various widths. The problem of the erratic flight of the airplane has been corrected by a stabilizer of the gyroscopic type, which will hold the camera level regardless of any fluctuations from the line of flight. Many inventions have been tested to free the camera of the intense vibration due to wind-pressure, the shaking set up by an eight- or a twelve-cylinder motor and the quivering caused by the airplane's progress at such high speed. Cameras have been bolted to the wings, to the fuselage and to tripods. Whatever method of suspension was used, there remained one fact; when the airplane tilted, the camera tilted also; and until the gyroscopic stabilizer corrected this fault, the so-called "verticals" were that in name only.

At the close of the war, the standard outfit was a 4 x 5 plate-camera, with lens 8½- or 10-inch focus, used always at its full aperture, F/4.5. Panchromatic plates were used exclusively. When the observer was detailed for duty, an elaborate but necessary procedure took place. Plates were inspected and placed in the magazine. They were then kept in sequence to enable identification after development. The camera was checked as to correct focus and operation. The U. S. Government adopted the

parallax system to determine accurate focus; but test-plates were also exposed before the camera was turned over for service. The parallax system consists of placing a sheet of plain glass in the plate-holder; thus it takes the place of a plate in position. A hole in the septum allows the image to be observed. The camera is focused on some object at infinity and some small point on this object is made to coincide with a fine line ruled on the glass. Then the eye of the observer is moved slightly from side to side; and, if apparent motion is observed, the lens is racked in or out until the line and the image of the object—which will be seen clearly on the glass—fail to show apparent motion. The theory of this is the same that applies to the everyday act of telling time. Owing to the small distance between the hands of a watch and the lines on the dial, a difference in time will show, depending on the angle from which the dial is observed. Parallax focusing will also serve for other than infinity. Any object to be photographed can be brought into absolute focus by the same method. A fine line ruled on a clean plate with a draftsman's pen, the plate inserted in a holder, with the lined side toward the lens and a hole cut in the dividing wall of the plate-holder, will serve.

After inspection and focusing, the camera was locked. Then the photographer had only one operation to perform, that was altering the width of the slit to correct for under- or over-exposure. Owing to an elaborate formula worked out by experienced men, great latitude of exposure was allowed and taken care of by timing when the plates were in the developer.

When in the air, the photographer operated the successive exposures by a changer-handle which moved a new plate into the camera and deposited the exposed one in a magazine. He had no distance to contend with, as all objects on the ground were at infinity, hence no focusing. This would also automatically eliminate depth of focus.

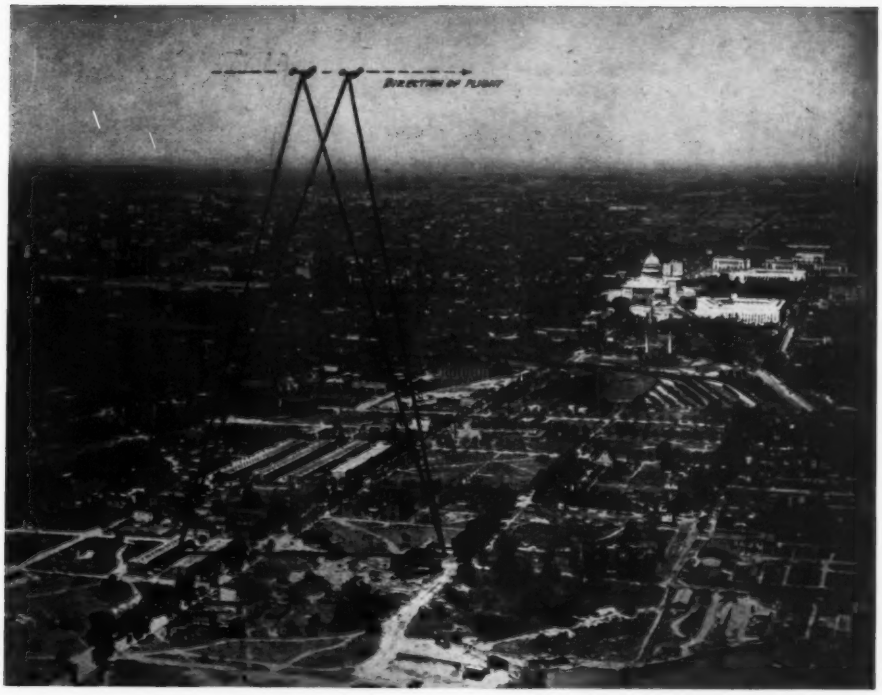
So far, this description has referred to "vertical shots." There is one other possible "shot" from the air, that is, oblique. Oblique photographs offer the only possibility for pictorial work in air-photography. They have been aptly termed "pictures from the grandstand in the sky"; and any one who has seen work of this kind—the grandeur of clouds in sunset-relief and the immense panorama of distance opened to the man who has the courage and the opportunity—cannot help marvel at the new era in art to open with the coming generation.

Right here is a good place to make an interpolation. Following the sublime—the pathetic. The Germans—no one who has fought against them can ridicule them—made a camera. It was almost five feet high with a corresponding focal length of lens. Imagine the diameter of the lens. It registered 8 x 10 plates and would make a picture from an altitude of 25,000 feet, equivalent to the camera used by the Allies at 10,000. It was of metal throughout and its one good feature was that its focal length was correspondingly longer than the range of the best "Archie."

My brother described an enviable experience in which he participated when one of the largest cities in this country was mapped from the air. At the time he mentioned, plates were used and the airplane descended after the magazine became exhausted. The changer-handle method was the best known then and the photographer had to be almost a master mathematician to calculate his data from the registering dials of the airplane. Latter-day methods described to me by Ex-Lieutenant Ward Browning of the Air Force are more interesting, although the former stands forth as the first attempt of this kind and it was a remarkable success.

First, the city to be mapped was divided into rectangles that overlapped at every edge, and, when this was completed, resembled a chess-board. Each rectangle was calculated so that it would be the field covered exactly by the plate when the airplane was at a predetermined altitude. Wind-tests were made to find the drift and the ground-speed of the flier. These calculations were checked in the air by instruments incorporated in the airplane and they told the photographer at what speed he was actually traveling with regard to the ground. Everything was automatic after that. The pilot began at one end of the chess-board, flew along and directly over the center of the first line of imaginary rectangles, set his course by some object below and proceeded down the next course and so on to the end. During that time the camera, filled with a roll-film seventy-five feet long, automatically clicked an exposure over the center of each block, wound into place a new section of film and, at all times, was perfectly vertical to the earth. This feature has a great bearing on the map, as it can be seen that if one block were photographed at an angle, the edge nearest the camera would be of greater scale than the farther edge.

When the air-work was completed, a suitable scale was set for the map. Having a known distance on the ground, such as the distance between two streets, the first film was inserted in the enlarger, the image either superimposed over an engineer's map of this scale or measured



MAKING STEREOSCOPIC PICTURES — EDWARDS W. DONALDSON

on the easel. After that, as each successive film was enlarged, it was matched to the preceding one by means of some continuous feature, such as a street or road. This would not be necessary if the pilot had been able to maintain a certain altitude; but, owing to uncontrollable rise and fall of the airplane, the films were found to be of slightly different scale. This was, of course, the reason for making the enlarged prints. When the prints had been matched, trimmed and mounted on canvas or board, maps of this kind were said to be far superior to the surveyor's plots, as they showed every detail.

It is predicted that airplane-photography will increase in value and become one of the professions of a modern age. Like the first experiences of "ground" photography, it will have to supersede many firmly established institutions; but its growth is even now making many noticeable inroads. Private corporations are engaging pilots and photographers to obtain views of their factories from a viewpoint which presents to their patrons a better idea than the old-time wash-drawings; the government is increasing its private air-force with a view to mapping many square miles of its land, inaccessible to the surveyor who must travel on foot.

One day in France we were at work in a field near a town and in charge of a British lieutenant. A humming, throbbing sound caused us to look up; and, then, a sharp order from the lieutenant caused us to look down quickly. "Keep your heads down until the plane has passed over. If you raise your heads your white faces will give away our position." Being under a tree, I stole a cautious look and saw a tiny fleck of tinsel high in the blue, hardly larger than the head of a pin, it seemed. Then the anti-aircraft guns opened, and a half minute after three small fluffs of cotton appeared near the shining speck. It changed its course and more cottony fluff-balls puffed out around it. It swung lazily in great circles, and the steady roar of shells whined away into the sky. Then came the rain of returning shrapnel and shell-fragments. The ground thudded and thumped and all the while the lieutenant smoked away, thinking of his next leave. The shell-fire stopped, and we knew

what that meant. Two diminutive chase-planes were mounting in great circles toward the big observer. The German turned and started an inglorious retreat toward the Fatherland. Of course, we cheered while the little fellow sped hot on the tail of the enemy; cheered them again when they returned, even though the big fellow got safely over the invisible line.

The next day they "double-timed" us from the town and the next day after that it was swept by the avenging storm. How did they know we were there, with our drab uniforms and dun-colored helmets? This is how: As the big German airplane passed over, the enemy photographer jerked the changer-handle and then quickly jerked it again. In one hour the two prints, made from viewpoints about 100 feet apart, had been mounted on a card, separated the customary two and three-quarter inches, and a German officer was viewing a perfect stereograph. Instead of seeing ground, into which the uniforms and helmets blended perfectly, he saw American soldiers standing out in high relief. The next time you have occasion to ride in an airplane, take along your film-pack camera, make two exposures of the same view, as fast as you can pull the tabs, and see whether or not the 100-feet separation, at that distance, does not turn out to be as realistic as the two and three-quarter inches stereograph made on the ground.

The International Los Angeles Salon

KARL STRUSS

THAT the Los Angeles Salon of International Photography has become one of the outstanding exhibitions of the year, second only, possibly, to the London and other well-known salons, is due in no small measure to the efforts of the group of camera-enthusiasts under whose auspices the exhibition is held. Having determined to show only that class of pictorial photography which is representative of the highest ideals and worthy of being shown along with exhibitions of etchings, engravings, etc., these camera-enthusiasts have had the courage to instruct juries that any print not coming up to a standard set by the exhibitors themselves is to be rejected. That the high standard of acceptance has been adhered to justifies the severer and more drastic standard that was established last year, when it was determined that for photography to maintain and continue to attract interest, not only from the public but from the more serious and conscientious workers, it would be necessary to bring contributors to the realization that only the most meritorious prints would be hung. The benefits have been twofold; first, the public is enlightened as to just what photography as an art is; and second, it means to the pictorialist a truer measure of sincere recognition.

In the preceding exhibitions, too many merely pretty pictures were shown—besides being poorly hung—and an anæmic standard was keeping away the strongest workers. However, these last two shows have demonstrated that the Los Angeles Salon is one of the big international shows of the year, and the recognition it has received from the Art Museum, in the establishing of a permanent collection of prints selected from each year's work, is a big step in the right direction to put photography in the niche it is destined to occupy in the art-world. No doubt this precedent will stimulate other Art Museums to establish similar collections; and to further this end it is incumbent on juries of selection to maintain the highest pictorial standards. Salon-committees would do well to select their juries from such pictorialists whose versatility of work and genuine interest have demonstrated their ability to render deliberate and impartial judgment. Persons who make but one style of print or subject would hardly be acceptable. It has never been shown convincingly that juries composed of critics, etchers, painters or illustrators have understood the problems and aims of the artist-photographers. How can they be expected to judge a medium they do not comprehend? The most efficient jury, it has been found, is composed of three persons; more are unnecessary, as their opinions are too diversified, and their results tend towards an uncertain standard. Each salon would do well to retain the same jury for succeeding shows, making changes as follows: beginning with three jurors, one would be replaced each year, so that no one juror would serve more than three years consecutively. This would permit using five different persons in changing combinations; so that for each succeeding year, two of the jurors from the year previous would remain.

And this brings to mind a condition that only the pictorialists themselves can remedy; and that is, that only prints in permanent media

should be sent to salons. The great bulk of rejected prints are thoroughly unsatisfactory bromide and chloride prints and enlargements. Most of them appear as though the corner drug-store had made them, instead of the artist; and just so long as salon-juries continue to accept such pictures, photography will suffer. It is really amazing that photographers, who make but a dozen salon-pictures a year to send to the numerous shows, have not enough respect for their art to print at least in permanent media such as Carbon, Carbro, Gum, Bromoil, Ozobrome, Oil, Platinum, Palladio and their multiples and transfers, commercial and hand-coated, as the materials are now obtainable.

Another point of equal importance that does not help photography is the abuse of the so-called "soft-focus" or pictorial lens. It is unfortunate that greater discrimination in its use is not exercised; for the general impression seems to be that anything that looks blurry must, *per se*, be a work of art. It is high time that pictorialists come to a realization that such, in itself, is not the case. Any lens, if rightly used, may produce a work of art; but a pictorial lens of itself will not render a pictorial result unless the fundamentals of composition are present in the negative, and are carried out in the final print by an exquisite technique. Lens-quality alone is not sufficient to earn a place for a print in a salon; nor is technique alone, nor print-quality alone, nor is subject-material enough; but a well-ordered, distinctive combination of all is necessary. There are too many arrangements, designs, patterns or exercises—if you will—sent in to salons and annuals; too much mechanics and too little feeling or individuality. Possibly, it will be from the kinematographers that future creative work will come; for the screen, today, is recording a splendid new influence, both wide awake and progressive.

So, too, technique must not confuse the pictorialist into believing that a bromoil, for instance, is a work of art, simply because it is made in that medium. One need only to see the splendid examples of real bromoil, oil and bromoil transfer of the English, Austrian, Belgian and German workers, to appreciate the shortcomings of most of the American work in the same media. One is not at all conscious of lens-quality in these exquisite prints, which show what may be accomplished by true artists. It is a pleasure and a delight to be able to inspect at close range these interesting interpretations; the artists seem to handle all kinds of subject-material in a distinctive and individual manner, and they have that rare quality of originality. The photographers in this vicinity, and those who have come from afar to view these annual international salons, are fortunate, indeed, to see only

MT. MANSFIELD FROM UNDERHILL, VERMONT THE PHOTO-CRAFT STUDIO

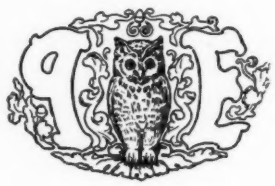
the very best that is being done in photography. Far better to see a few wonderful prints and derive some inspiration from them, than to be bored by the mediocrity of too many pictures.

It might not be amiss to mention something of the manner in which the prints have been hung. Each individual's work is kept together in a group; and, although last year the foreign work occupied one half the gallery, this year the salon-committee hung the groups regardless of whence they came. However, the former method of keeping each country's work together seems to be the better plan. Individual prints were hung under glass in a single line on cream-colored cheese-cloth, which eliminated the spotty effect noted in former exhibitions, where two or three rows of prints were hung. The introduction of the strip of cheese-cloth, a yard wide all around the gallery, on which the prints were placed, gave a dignified impression, as the cloth, over the greenish gray of the walls, broke the great contrast between walls and prints. To quote one critic, "The artist-photographers can give several pointers to the painters on the arrangement of an exhibition, if not in the work itself." Another wrote, "From over 1200 prints submitted, the jury had the courage and will-power to back up their courage to accept but 183 prints (1921 Salon), which results in a superb collection. Each print is important either because of its originality or superior craftsmanship. The photographers are to be congratulated on an exhibit which will stand firm under any tests applied to it. That the standard of acceptance has been high should be a stimulant rather than a discouragement to all individual exhibitors." It is unfortunate that there were no photographs made to illustrate the *tout ensemble;* for the last two salons were exceptionally beautiful in their presentation. The hanging of a salon is fully as important as the selection, just as the proper mounting of a print enhances its value.

The Camera Pictorialists are to be congratulated on their attitude in maintaining such a high standard of acceptance and in the presentation of their exhibitions; and, although there be many prints submitted, and but few chosen, be assured that those few are a credit to photography. It is important that all photographers support this salon; for it is shown under the most favorable auspices in a city where there is more photographic interest than anywhere else in the world. Of vital interest is the fact that at this salon, more prints and duplicates have been sold than at any other salon; showing that there is a definite interest that should attract more of our leading workers; for, after all is said and done, no art is successful unless it is so commercially. So next year, if you are a bromoil devotee, be sure that you can duplicate your prints, for there may be orders for them. The fact that more foreign prints are sold is due to two causes: first, the prices are much more reasonable even for the most beautiful prints, and second, the subject-material is more pictorial —one might almost say more "artistic" in its conception and execution.

Of thirty-four foreign workers with 104 prints, the average was three prints to each contributor; whereas of forty-eight American workers with 116 prints, the average was lower. The encouragement that foreign workers receive from the sale of their prints makes this exhibition well worth their best efforts, and should bring increased numbers of these talented artists to future salons. Los Angeles has something definite to offer all pictorialists; and, if the quality of work submitted is of high enough standard, the show will increase in size, as there is plenty of room. Three years ago, one print was purchased, last year twenty-five, and this year over forty! It is interesting to note that of the eight prints purchased and presented to the Art Museum, only one was by an American pictorialist. And therein lies a lesson.

[In recognition of the position which pictorial photography occupies today in the realm of art, the Los Angeles Museum has determined to establish a permanent collection of pictorial photographs. For this purpose, Mr. William Alanson Bryan, Director of the Museum, and Mr. Karl Struss, pictorialist, have provided a fund for the acquisition from this and subsequent salons, of those prints, to be selected by a special jury, which are to form the nucleus of this collection of pictorial photographs.—EDITOR.]



Photographic Pals

H. P. WEBB

FRIEND wife and I are pals and have been for—but that would be telling, and one must not tell on his pal. However, suffice it to say that it has been for a sufficient length of time to prove it to be permanent. Now, mind you, during nearly all these years I have been a "kitchen" or a "bathroom-photographer."

THE TWO WAVES H. P. WEBB

Right here, I think I see in the reader's mind's eye developer-stains on the kitchen's enamel, hypo-spots on the hardwood-floors, linen-closets cluttered with chemicals, printing-frames, drying-racks, etc., etc.,—*ad infinitum*. Guilty, and then some! And I repeat: Friend wife and I are pals. "Oh well," the reader reflects, "Poor fellow. Look where he lives—Hollywood! Is there a better place on earth for growing a crop of Münchausens?"

But you see, dear reader, it is just this way: My Pal loves photography as much as I do, and although she does little actual work in photography itself, she colors the photographs I make. Forgiven are the stains, the marks, and the clutter, when I produce for her the picture she likes. And since one should go "fifty-fifty" with his pal, it is not infrequent that I wash the dishes or sweep the floors while she turns my picture into one that I like—portrayed in natural colors.

It all happened this way: My Pal and I, and a tiny replica of my humble self—then only four months old—were on our way to Yosemite Valley, where I was to spend fifteen weeks in viewing the splendors of that wonderful region, through the medium of a red light, and myriads of films, and pieces of Velox. No railroad approached the valley in those days, the journey from the railroad being made a hard but thoroughly enjoyable two-day stage-ride.

At one of the stage-stations a young man was seated at a table on the veranda, "tinting" Kodak views and selling them to the travelers. We watched him for a while and he answered our questions cheerfully. My Pal became greatly interested. We sent for a box of paints, and in camp that summer—with the patience of Job—she practised coloring photographs.

And this began what since developed into a pleasant and profitable pastime, not without tedium, where orders come too thick and when pictures are to be colored by the dozens, but with increasing satisfaction when we obtain a new negative, photographed at some rare or

particularly favorable moment. It is then that my Pal is eager to work at it; and, when she is through, one realises that the combined product is far superior to a monochrome photograph, however rich and pleasing that may be. My Pal has thus become my complement. I think in terms of light and shade; she supplies the color. My work deals with composition and masses; she finishes that work by amplifying and beautifying the details.

Not long ago, an acquaintance told me of a trip he was about to take through a region of great pictorial beauty. He was to be accompanied by his wife, and he made the significant remark that "he did hate to be hampered by a skirt." I made no reply, but I felt truly sorry for the man, who, though married, had no pal to accompany him on his trips, and for the wife, who had so little in common with her husband, that her presence on a pleasure-trip was regarded as a hindrance. And I thought of the little trips that I and my Pal had made together, as well as of the larger ones we hope to make in the future. And always accompanying the remembrances would be the pictures we had made, and then the enlargements, the painting, and last but not least, the profit.

One of the pleasantest phases of our little outings together has been the preparation. Sometimes, for example, when about to visit one of the old Missions, we would read aloud to each other an old Spanish romance, together with bits of history or legend connected with the Mission. Then the ruined arches, the old adobe walls and the ancient tiled roofs would take on additional meanings, and once again we would see the old Franciscan Fathers directing, teaching, and leading the Indian neophytes.

To color photographs properly is not an easy task and a long time spent in painstaking practice was necessary before we could put any prints upon the market. But anything that is easy is not a worthy subject on which to spend much time. At first, we used transparent colors, but these we found fugitive. We then changed to body watercolors, using only those pigments which had been subjected to a severe fifteen-year light-test. These were harder to apply; but the results were not only far superior at the time, but also such as we could claim that when framed the pictures would retain their original freshness for many years; and what picture that will do less is worthy of a good frame? Our prints are made on rough-surfaced paper, the rougher the better, especially in larger sizes. Because of this we use a good deal of the foreign bromides in our work.

We have found that the best results are obtained by making the prints moderately sharp. In making the negatives I focus on the main object, but leave the lens entirely or nearly open; then, in making the enlargement, I focus first as sharply as possible, then rack the lens ever so little forward to take away any suggestion of unnatural sharpness. We work for the most part for bright, sunny effects. To get these, the foliage must not be too dark, and must have good color-values; hence, liberal use of the ray-filter. The use of cream or buff papers aids in sunshine-effects, although these are not suited to all subjects. Prints should not be made too dark, but dark enough to give character to the picture. Shadows should never be black but should be clear and decided. Any suggestion of muddiness in the shadows gives muddy effects which no amount of color will remedy.

Our greatest difficulty was to portray the skies correctly. When clouds were obtained by means of the ray-filter, the blue portions were often too dark for proper effects. Finally the solution was for me to print most of my pictures with white skies and to let my Pal paint in her own clouds. This did not prove to be very difficult, although it is the only original painting she has done. I obtained for her a number of good photographs of clouds. She read carefully directions to make clouds in watercolor, and practice did the rest.

In doing work for the trade, we have found that pictures of objects of popular interest are the best sellers. Fortunately for us, these are among the best subjects for pictorial work. The old Missions rank first of all, occupying more than half our time. Pictures of California trees, especially the eucalyptus, and marines are also popular and we have devoted our time almost exclusively to these three subjects.

Several of the eucalyptus pictures that appeared in the October number of PHOTO-ERA MAGAZINE make good subjects for painting and are good sellers, especially the one on page 178. The two white trunks and the long horizontal limb are set off by the little silver streamlet and the first yellowish, green grass of Spring in the foreground, and by the purplish hills in the distance. Above the limb, a sky is painted with patches of blue and little white clouds.

"The Old Fountain at San Fernando Mission" makes an interesting study. The varicolored flowers in the foreground set off the old brick-and-cement work of the fountain, and the pepper-trees are colored in light, spring green where the sun catches them, with a purplish cast to their shadows. The Mission-arches and belfry are of a tan-color surmounted by moss-colored tiles, and these complete the picture.

OLD FOUNTAIN AT SAN FERNANDO MISSION H. P. WEBB

The marine, "Two Waves", caught just as two large waves were breaking, is the result of watchful waiting. Only once in many hours may such results be obtained; and one must take his position on a rock with camera set, prepared to wait. The waiting may be tedious, often unavailing; but an occasional good wave-picture gives ample reward. The negative is not perfect, a slight film defect appears on the outer wave. This is remedied easily in the coloring, and an enlargement on white, very rough bromide produces an effect when colored that is rather difficult for the layman to distinguish from an original watercolor. The sky, which is printed white, is colored first and this gives the key-note for the coloring of the water, though the latter is, of course, also affected by the color of the rock and seaweed. The whole comprises a study in blues, purples, greens, and browns, and the subject is one which may be treated in several ways and each be true to nature as we see it at different time.

Some of our friends have often made the remark, "Oh, what wouldn't I give to have such talent as you two possess!" We do not believe that the modest success we have attained is due so much to any inborn talent as to keeping everlastingly at it. My Pal has replied that she believed that there are many who, if they but put the time, study, and painstaking work into such an undertaking would be bound to get results. We agree with Edison's oft-quoted saying, "Inspiration is 99% perspiration."

It is agreed that every one should have a hobby—something worth while that one likes to do and that takes his mind away from the humdrum of this work-a-day world. And this is written especially to the man who has made photography his hobby. You like to make pictures and you do all in your power to make them beautiful. Is it not possible that there lies some latent power in the one you have chosen to go through life with you; and that, after this power is developed, your pictures and your pictorial trips will take on added meaning? And it's such fun to work it out together!

THE faculty of observation can be cultivated—and the beginner will find that as he proceeds he improves in his perception of the pictorial. He will come to view things after a while which conform to the established principles and which will receive recognition from those who know what art is.

H. W. SPROULS.

LOW TIDE PETER BOTEL

Some Photographic Devices and How to Make Them

CHARLES W. LONG

PROBABLY most of the devices which form the most valuable aids to photography found in the photographic stock-houses today were originated by amateur photographers with a mechanical turn of mind and the constructive skill requisite for their development. The amateur of twenty or thirty years ago could not go to the shop and buy the variety of little conveniences that are on the market to-day. If necessity demanded a vignetter or an enlarger or a drop shutter or a masker he was obliged to set his wits to work and devise one—*and make it himself as best he could.*

The true artist is, above all else, endowed with imagination; and imagination is the stock-in-trade of the inventor. It is not surprising, then, that the photographer should find himself peculiarly fitted to meet the innumerable necessities which his particular trade demands. He can depend upon the help of outside genius only to a limited extent; for to invent a photographic device that will completely and adequately "fill the bill", the artisan must be not only an artist but must be familiar with the utmost detail of photographic principles and processes.

Sometimes I find many things in stock-house catalogs whose reason for being seems to be the necessity of the inventor rather than that of the photographer. The authors of these appurtenances were very evidently not practical workers. It is really not difficult to distinguish between the efforts of the one class and the other. Run through a stock-house catalog and jot down a list of the articles there represented that would be an aid to your work if you had them, note the price after each item and make a total of the amount. Then turn to your back files of PHOTO-ERA MAGAZINE, and other photographic magazines, and make an estimate of the value of the suggestions that you find there—simple, little devices that you can make for yourself and that are fully as effective as the more elaborate store-purchased article. You will then be in a better position to appraise properly the value of such magazines to your work from the standpoint of mechanical aids alone.

No doubt, some of these suggestions would have a considerable marketable value if patented and properly exploited; but through the freemasonry and unselfishness of the camera-craft they are passed on to you gratis. That is a splendid and a remarkable thing, when you stop to think of it; and it is refreshing in these days of sordid commercialism and greed. Such altruism could exist only among artists or, perhaps, among the better class of sportsmen, for I have noticed a similar condition and a similar exchange of ideas among the readers of magazines devoted to hunting, fishing, camping and kindred subjects. For that matter, the camerist is a sportsman, too; a gentle hunter of the most wary and elusive game, and a worshiper at the same shrine—Nature.

It has been said that a woman can take a hair-pin and a razor-blade and make anything she needs—but a man must have an armful of tools. There is this to say for the woman—she certainly will make the attempt. Let us honor her for that as she deserves, and emulate her to the extent that we will not let the lack of tools be an excuse for allowing our difficulties to get the better of us. Tools we must have, of course; and the more complete the equipment the more things we can make and the better we can make them. But the ordinary domestic implements, with which every household is equipped, possess great possibilities in the hands of an enthusiast stimulated by determination and ingenuity. I have seen "miracles" performed with no other tool than a pocket-knife. Resourcefulness is a more valuable asset than a complete kit of tools; and if the attempt at solving your own mechanical problems does nothing more than stimulate the cultivation of this trait, you will be amply repaid for your efforts in this direction.

But enough of the sermon. I think that I have properly prepared the reader's mind to appreciate a few of the suggestions I am about to offer; and I feel sure that after he has attempted to duplicate some of these ideas, armed with no greater array of implements than were possessed by the writer, his estimate of their value will be very much enhanced.

A Home-made Flash-Lamp

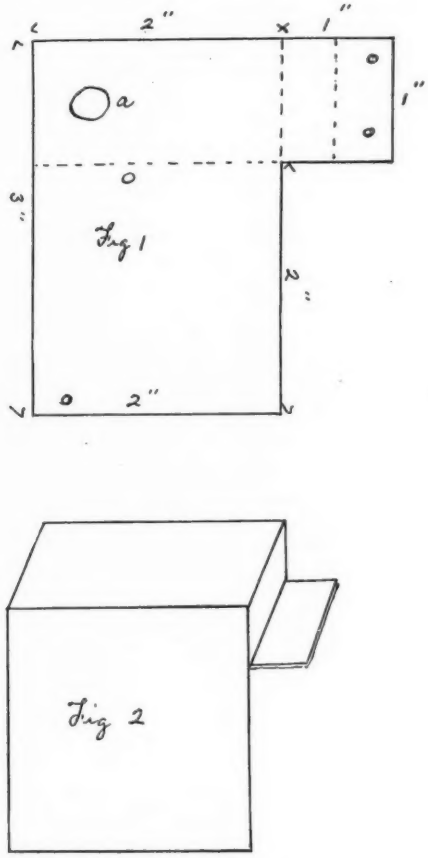
Not very long ago I found myself sadly in need of a flash-lamp. Being out of touch with a photographic stock-house—it would require several days to obtain one from that source—I determined to make one. Long ago I formed the habit of storing away little odds and ends of metal and wood, and various other kinds of "junk" for possible future use. Small bolts, nuts and screws—especially small brass-screws—parts of broken apparatus that required not too much space for storage, these I always save; and I have quite a collection of such "plunder."

I buy my plug-cut tobacco in one-pound and half-pound tin-boxes and save the "empties" in which to keep this potential material. Everything used in the construction of this flash-lamp came from these depositories; and many another dollar have they paid me in dividends besides.

The sheet of brass, which forms the base of the lamp, was formerly part of the face of an old steam-gauge. I had to borrow a pair of tinner's shears to cut it into the shape I wanted it; but the blade of a hatchet, used as a cold-chisel, would probably have done as well, had I not been fortunate enough to procure the shears.

A—FLASH-LAMP

A few experiments with a sheet of stiff paper determined the proper size and shape which are shown in Figure 1. A hammer and a pair of pliers finally induced it to assume the form shown in Figure 2. The photograph (A) shows the lamp ready for action. It works like this: A short piece of wire is heated red hot over a miniature alcohol lamp, and upon pressure of the piston-bulb is plunged into the flash-powder. Now, right there, is the whole proposition in a nutshell. What we wish to accomplish is to apply fire to a small quantity of flashpowder so that the former will ignite the latter, with the minimum amount of damage to the operator, the subject, the accessories or to any innocent bystander, and with the greatest possible beneficial effect upon the picture we are eager to obtain. Also, the more fuss, work and worry we can get along without, the better.



PATTERN FOR LAMP

Various flash-lamps upon the market accomplish this result, to a greater or less extent, but in different ways. Some are ignited by means of friction, some by percussion; some require the use of an electric spark or electric hot-point; others simply need the touch of a lighted match to a fuse or to the powder itself laid in a

train or in the form of a sheet. But the result is always a flash of some kind, and it is with the apparatus to produce this flash that we will concern ourselves now.

Other solutions of the ignition-problem will doubtless occur to the reader, suggested, perhaps, by the possession of some old apparatus that he may have placed upon the retired list and which it may seem possible to adapt to the purpose in view. Some of the transformation that may be effected by a resourceful tinker is remarkable, and often amusing. Invention is not the only child of old Mother Necessity; but some of her offspring are certainly changelings.

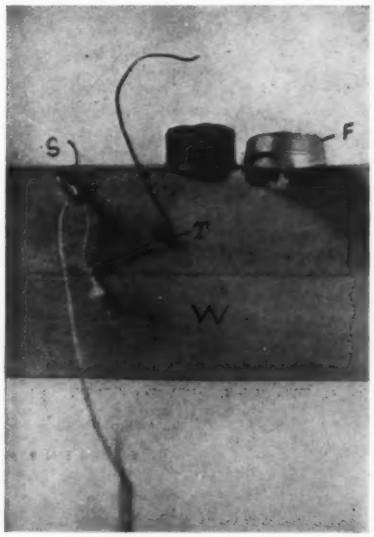
The piston I used, I obtained from an old worn-out shutter. It was not really essential to the successful operation of the lamp, as I will demonstrate before I am through, but I had it—so I used it. The moral effect of compelling the thing to work finally fully compensated me for the trouble it caused me. The arm that looks like a reversed question-mark for a long time seemed determined to function solely as one; but eventually, I found the answer. It was made from thin sheet-brass, after exhaustive experiments with cardboard and pins.

The short piece of wire that receives the heat that ignites the powder, in this House that Jack Built, I obtained from one of the 100-watt electric bulbs. I do not know its composition; but it is calculated to withstand a very intense heat, as it functioned originally, and as it surely must in its present environment. The alcohol-lamp I made by cutting off the base of a brass shot-gun shell. It is packed with absorbent cotton. I saved the rest of the shell—it may come in handy sometime.

The upright rod, which supports the whole affair, is made up of a number of sections of binding-posts from old loose-leaf ledgers. One end of each section is a threaded tit which fits into the opposite end of each other section, so that any thin object that contains a hole slightly larger than the tit may be clamped easily between any two sections. Such a hole I drilled in the horizontal portion of the lamp-base at "a". By breaking the rod at any of its joints I can adjust the lamp to any height desired.

The flash-pan came from an old broken hand-lamp. It is fastened to its seat on the bent angle of the base by means of two brass machine-screws. Its high perpendicular back made it necessary to sink it below the level of the top of the lamp-base; but with an ordinary shallow pan, this feature would not be necessary and that would simplify the shape of the base to that extent. There was a hand attached to the old steam-gauge, from which I procured the material for my base; and the hole in the end being just right in size, I slipped it into the joint where I clamped the lamp on and bent it into shape to act as a reflector holder. An old fountain-pen clip acts as a support for the upper edge of the reflector.

I used a light camera-tripod as a stand for the flash-lamp. This tripod has a metal top which consists of a dish-shaped aluminum disc surmounting a triangle of brass, the latter carrying the lugs for the tripod-legs. By removing the



B—FLASH-LAMP

aluminum-disc and the tripod-screw, I have a solid, brass platform which contains a hole of the proper size to clamp on my lamp-supporting rod, in the manner previously described.

Now, if I had been really in a hurry or had not happened to have the resources of my tobacco-boxes to draw upon, I might have contrived something like I have shown in the photograph marked (B). "W" is a piece of wood—a strip from an old packing-box, to be accurate. The interrogation-point is a piece of copper wire. "T" is a tack of the common or carpet variety. "S" is a screw-eye. "S" also stands for staple which would do just as well—or you might bore a hole in the wood and carry the string through; or, more simple still, throw the cord over the top of the strip and draw it toward you under the bottom. Always strive toward simplicity, for

simplicity is always perfection when it is not obtained through the sacrifice of safety and convenience. Attached to the tail of the interrogation-point is a piece of string which answers the purpose of a power-transmitter just as well as the piston-tube-bulb contrivance. The flash-pan "F" is the lid of one of those toppy, tin tobacco-boxes that fit the hip pocket. A baking-powder or chocolate-can cover are among the alternatives that might be used in a pinch.

I show the same alcohol-lamp which I used in the more elaborate affair; but my suggestion for an alternative would be the screw-top of a pocket-flask—many of which seem to be idle at the present time. Stuff it with cotton, and it will perform as if to the manner born.

A very neat little alcohol-lamp can be made from an empty rifle cartridge-shell and since the accompanying photograph was made, I have made such a one. It is best to use a shell of the high-power variety with a bottle-neck; then the larger, lower part of the shell serves as a reservoir for the alcohol, and the constricted neck very adequately forms the burner. A cotton torch-wick should be inserted, using just enough strands to fill the neck and prevent the saturated wick from dropping from its own weight and still not to be packed too tightly to burn freely. A revolver-shell of the right size forms a cap to prevent spilling and evaporation.

Any amateur who has ever attempted flash-light photography at all will at once appreciate the advantage of any ignition-system that is so thoroughly under the control of the operator. The picture entitled "The Midnight-Luncheon", which accompanies this effort, illustrates, beyond the ability of words to describe, the value of flash-light exposure when it happens to be used at the exact pyschological moment.

I have confined this description to the ignition-element alone, but there are in general use a number of accessories such as diffusing-screens, smoke-bags, two-way bulbs, test-lights, et cetera, without which it seems impossible for some workers to get along. Most of these may be classed as luxuries, but may be added to the equipment if they seem necessary. All such devices help to make flash-light photography more convenient and more pleasant and the construction of them should not greatly overtax ordinary ingenuity and resourcefulness.

Extension Tripod-Legs

The other day I was called upon to make a picture of a house which baffled me at first, to find a suitable point of view. The building stands at the top of a knoll, the ground sloping away from it in all directions. There was but one line of attack open to me and that was from a position so far down-hill that the image upon the ground-glass looked as if the house were about to fall over upon me. Elevation of the camera was an absolute necessity. My first idea was to procure a pair of trestles and build a platform to support the camera; but no trestle being available, I finally hit upon the idea of elongating the tripod-legs to the required length for success.

C—EXTENSION TRIPOD-LEG

Three strips of wood, about one inch by three-quarters, each four feet long—three small screw-eyes and a few minutes' labor with a jack-knife and handsaw resulted in the contraption shown in the photograph "C". A simple push sets the extensions firmly into position and a straight pull disjoints them. They elevate my camera to a height of about eight feet, so that I am obliged to stand upon a chair to do my focusing. They are fairly portable and somewhat of an improve-

ment upon the tripod employed by the Cadbys (see PHOTO-ERA, January, 1921) under similar circumstances, while photographing an old English house. Dr. Pardoe (see PHOTO-ERA, July, 1920) lashed three saplings to the tripod-legs in order to reach the opossum in the hollow tree, so I cannot claim originality for the idea. The method which I employed may serve to suggest possibilities only peculiarly applicable to individual cases and unusual situations.

You will now have a double hook that forms a slot which will readily support the filter and it only remains to bend the ends of the wire backward and upward to form a hanger, resting either upon the lens-barrel or hooking behind the shutter, as the construction of your equipment may demand.

I made one of these while in the field one day, using a piece of wire that I found along the road, dropped presumably by a lineman. Upon my return home, I replaced it with a permanent one of more finished design, made of brass spring-wire. We are told that the proper place for a ray-filter is back of the lens, but it is hardly possible to place one in that position when we are using a small hand-camera. Whenever the size of the front board has permitted it, I have always employed three knee-shaped clips, made of thin sheet metal, which are tacked to the inside of the lens-board, one at the bottom and one at each side. Into the slot formed by these clips either a square or a round filter may be slipped easily.

THE MIDNIGHT LUNCHEON — CHAS. W. LONG

Ray-Filter Holder

In November 1920 PHOTO-ERA, Mr. Miller contributes a description of a ray-filter holder that he made with cardboard in two hours' time and that cost but a few cents. In the December 1920 issue, Mr. Conradi goes him one better with a device, made of wood and screw-eyes, at a negligible expense and with twenty minutes of labor. Here is one that still further cuts the H.C.L. and is equally frugal of both time and skill of the maker.

Take a piece of copper-wire, sixteen inches long, and bend it at the middle into a U, making the distance between the perpendicular sides a little less than the width of the filter. Lay the wire U flat upon a table and place the filter upon it, flush with the bottom of the curve. Then, bend the ends of the wire down tightly against the filter. If you are afraid of breaking the filter, a card or an old plate may be substituted during the process of the bending-operation.

An Efficient View-Finder

European camera-makers seem to realize, to a greater extent than the American manufacturer, the inadequacy, as a rule, of the ordinary view-finder with which the hand-camera is commonly equipped. These finders are described in the catalogs as "brilliant," but in practical operation they are almost useless. Sometimes not only

are they inaccurate as to a proper registering of the field of view that the lens includes, but the image is so small that it is almost inpossible to recognise objects at any considerable distance.

The direct view-finder, although overcoming a great many of the deficiencies inherent in the reflecting-type of finder, still retains some of its defects, not the least of which is the small size of the image. As an aid to composition it is, on this account, of little value. The iconoscope finder which is now being placed upon some of the European cameras is merely an adaptation of the old pocket view-finder which we used to make with cardboard over twenty years ago.

The great talking-point in favor of the reflecting-type of camera has always been that one could "see the picture the full size of the plate—right side up and in focus up to the exact moment of exposure". This is practically what is accomplished by the iconoscope. Of course, with any but fixed-focus lenses the focusing-scale must be used, especially for near-by objects; but with that exception, the iconoscope improves the ordinary hand-camera in so far as the pre-viewing of the picture is concerned.

But the best thing about it is its simplicity. There is nothing intricate about it. It has neither lens nor mirror. It lacks substance. Like the hole in a doughnut, it consists essentially of environment.

But simple as it is in theory and in practical operation, the application of an iconoscope to a camera is not without its difficulties. The first one I attempted to make occasioned me no little bother. My next attempt was more successful, and, if a description of it will smooth the way for any worker who wishes to try it, perhaps this article will be justified.

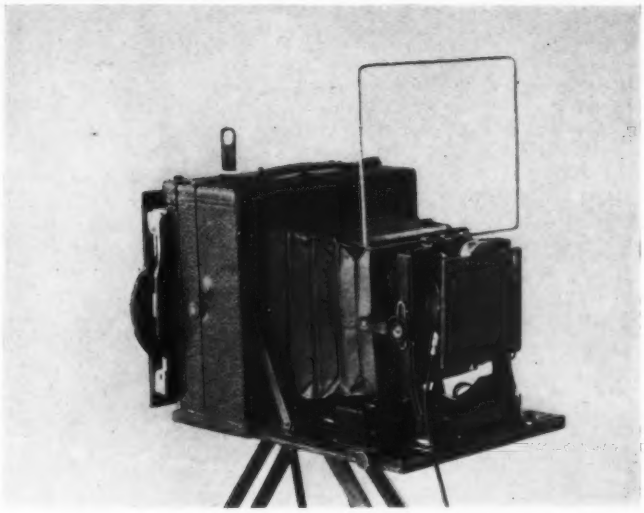
A glance at the accompanying photograph will explain at once the theory of the device. It consists of but two parts: a piece of wire bent into the form of a rectangle, the size of the plate or film being used, which is mounted upon the plane of the lens and moves with the latter through all its adjustments; and an eye-piece, mounted approximately upon the plane of the film or plate, which contains an aperture of such size that when held close to the eye the field visible within the rectangle will correspond with the image upon the groundglass.

The mathematicians among your readers are probably able to give a formula to determine accurately the two points of primary importance, namely, the proper size of the aperture and the required distance between rectangle and eye-piece for a lens of a given focal length. For my part, I was so busy trying to determine a simple and effective means to attach the thing that I was content to cut and try until the result was satisfactory. I can come within an eighth of an inch of a clean bull's-eye every time with my finder; and that beats anything I have ever been able to accomplish with any other. To the wire-rectangle I gave my attention first, practising with soft copper-wire until I was able to bend a 4 x 5 with all its sides occupying the same plane. Two pairs of pliers helped to make this operation somewhat easier, although there were times when I would have appreciated an extra hand to manipulate a third pair. A neighbor's boy who was watching me wondered what I was going to do with all the "wrecked tangles" I was making, but I refused to become discouraged. Persistent effort was ultimately crowned with success, and, having learned the proper method, I proceeded to apply it and used brass spring-wire of about one-sixteenth inch diameter.

To mount the rectangle upon my camera-front I used the half of an old brass-hinge which I found in one of my boxes of odds and ends. I knocked out the wire-pin and calipered it, thus determining the size of the wire to use. I cut the wire a little longer than the eighteen inches required for a 4 x 5 rectangle; and, in bending it brought the joint at the center of the bottom side so that, after trimming, the two ends met in the middle of the hinge-support and were concealed by it. When in position, the wire could be folded downward against the front, when the camera was closed. It occupied very little space and the additional weight was practically nothing. With a hack-saw I trimmed the wing of the hinge to the proper width to fit the top of my front-board, and drilled two holes for small, brass wood-screws. If the camera-front is of metal instead of wood it will be necessary to drill and tap it for machine-screws. This is not difficult, however, and the additional outlay for the required tools will not be regretted.

It may be found compulsory to modify this method of fastening the wire, owing to the construction of the camera-front; but the description I have given may serve for a working-basis. When ready, the rectangle may be fastened at once to the front-board, for all subsequent adjustments are to be made by means of the eye-piece, the construction of which we are now ready to undertake.

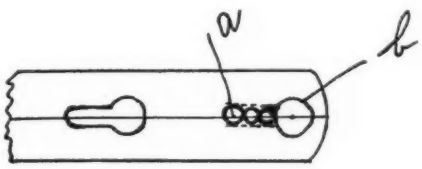
The first thing to be ascertained is the position of the center of the aperture; or, in other words, the height above the top of the camera-back that will bring it opposite the center of the wire-rectangle so that we may know how long to make the perpendicular wing of the angle-piece which contains the peep-hole. This point may be readily determined by laying a straight-edge



D—CAMERA EQUIPPED WITH ICONOSCOPE VIEW-FINDER AND RAY-FILTER HOLDER

across the top of the camera-back, extending through the rectangle, marking the center of the rectangle upon this straight edge or upon a card pinned to it, and continuing a line from this center back along the straight edge.

To determine the proper size for the peep-hole, I experimented with various-sized holes cut in pieces of cardboard, moving them forward and backward, fastening them meanwhile with thumb-tacks, until the field of view embraced by the boundaries of the rectangle corresponded to that shown upon the groundglass. If the camera is not provided with a focusing-screen, as a majority of the hand-cameras are not—more's the pity—a temporary screen may be improvised by using groundglass, mat-celluloid or even paraffined paper, in a pinch. However, care should be taken that the screen occupy the exact plane of the film and that the proper dimensions are outlined plainly.



KEY-HOLE SLOT

The material for the eye-piece may be brass, german-silver, aluminum, or any sheet metal of sufficient stiffness so that it will not be bent out of shape easily. I made mine by straightening out an old picture-moulding hook. This strip I bent into a right angle, drilled the peep-hole and carefully reamed it so that it would conform in size and position to the specifications previously established. This part is fastened to the top surface of the camera-back by a key-hole slot that fits over the head of a round-head wood-screw and may be readily detached when not in use. It is my intention to add another slot and screw, the more readily to keep it in proper alignment.

The key-hole constitutes a very clever little expedient to attach the various fixtures and appurtenances that it may be desired to remove quickly and conveniently when the appliance is not set up for use. At the same time it permits instant restoration of the device always to its proper position. It is very easily contrived when you have the proper tools. A small breast or hand-drill is the most effective implement to use for such a purpose; but not being fortunate enough to possess one, I usually makeshift with a bit-brace, mine being provided, fortunately, with a chuck whose jaws close tightly enough to hold a very small twist-drill.

Having determined the exact location for the

screw when the appliance is fixed in position, drill a hole at that point (a) closely fitting the shank of the screw to be used. At a point (b) about 3/8 inch or 1/2 from (a), drill a hole large enough to admit the head of the screw freely. With a scratch-awl or knife-point draw a line that connects the center of these two holes, and parallel to this line draw two lines, on each side of it, separated by a distance equal to the diameter of the smaller hole. The two holes are now to be connected by a slot; and this may be accomplished by drilling additional holes along the line a-b, using the smaller drill, and finishing and smoothing out with a small, flat file.

Two such slots are usually employed, placed either side by side or in line end to end, their position being governed by the size and shape of the piece that contains them. Round-head screws should be used, as they are flat under the head instead of being tapered for countersunk holes. The screws are inserted until the space beneath the under surface of the head is about equal to the thickness of the material that contains the holes. In use, the larger end of the key-hole is slipped over the screw-heads and the shanks of the screws forced into the narrower slots. It should go on tight enough so that it will take a little force to remove it.

Ten Facts the Executive Should Remember

LESTER G. HERBERT

ONE of the heavy expenses of business today is labor turnover. Any plan or method which lowers turnover is desirable, because it effects a material saving and encourages increased efficiency. So, in reality, the *apparent saving* is more than doubled in the ultimate result.

Reasonably good working-conditions, fair play, and a balanced program of life, make for satisfied employees. Those who, for example, are held at more or less monotonous tasks through the day, *really need* recreational activities of a suitable character, or the suppressed energy and desire for variety will express themselves in dissatisfaction, unrest, quitting the job, and even in strikes.

2. Many people are inclined to look with respect upon new systems and new policies. The mere fact that a system or policy is new by no means guarantees that it is good. We can be open-minded; but we do not need to be gullible. That which has been tried and found valuable should not be lightly displaced on the one hand, nor should progress be prevented on the other.

The logical thing to do before trying a new system or method which entails both effort and outlay is to make a thorough investigation, to canvass the whole situation thoroughly. Seeing clearly *around a matter* from start to finish will often prevent expensive experiments. This was not the case with one executive who recently tried a new system at a cost of $5,000,—to say nothing of the time and inconvenience involved—only to find it inadequate and impractical.

If thorough investigation proves that the new system or new policy is sound, and its engineering-principles safe, then those in charge of the work will have courage and confidence to go ahead. But mere experiments are expensive, and exceedingly destructive to nerve-force. Be as sure as is humanly possible that you are right; then go ahead.

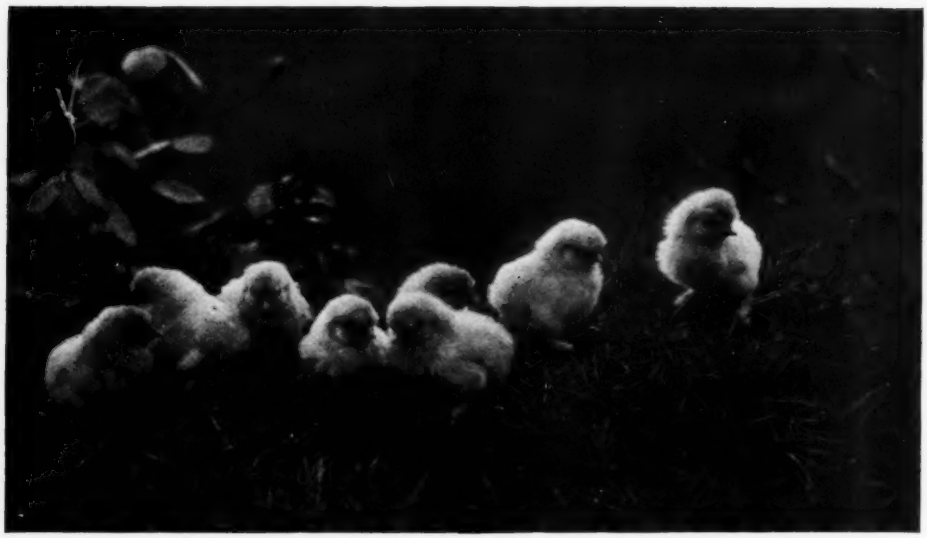
3. The wise executive is almost continually exhorted to be liberal of commendation; to be ready to give credit, and to be free with words of praise. Like most good advice, this needs qualifying. Some folks are spoiled by too much praise; others can stand a good deal of it. It is the province of the executive to diagnose accurately the temperament of the individual dealt with—and to administer the correct amount of verbal credit. Also it is equally important to administer the tonic in the right manner.

There are people who enjoy praise so much that, unconsciously, perhaps, to themselves, they set the stage so that what they do will be continually in the limelight. Sometimes, they are even jealous of others having a just and fair part in the program. In reality, a worker of intelligence and good judgment should expect no praise for doing his duty; yet an occasional word of sincere appreciation on the part of the one in authority will stimulate sustained effort, and perhaps will fire ambition for still better results.

The secret of the situation is to *praise the work and the outcome of the task*, rather than to praise the worker himself. This places the emphasis where it belongs.

This point may be illustrated by the case of the little boy who, at some risk to himself, pulled his small brother out of a tub of water in the mother's absence. The mother praised the

THE LITTLE HORSEMAN
ELEANOR L. SMITH



Courtesy Ralph Harris & Co.

AN EASTER GREETING — J. B. B. WELLINGTON

rescuer repeatedly, gave him candy, and told everyone who came along of his quickness and courage. The child was so pleased with himself, and with being a hero, that he soon became an insufferable little prig, and after that was continually trying to coax the small brother into positions of peril so as to effect a thrilling rescue. One day he failed to make the rescue, however, and the little brother fell into the well and was drowned in spite of all efforts to save him.

The danger might have been averted if the mother-executive had been wise enough to lay the emphasis of the first intuitive response to need on the trying situation, and had she rejoiced in the happiness of an unbroken family-circle. In this way, the older boy would have had his attention directed outward instead of inward. The executive who praises wisely stimulates further effort without spoiling the worker.

4. An executive must learn to judge men. This is easier said than done because of the different types of men, and because of the different manner in which these types express themselves. There are good books which deal with this subject clearly and analytically. Experience is an excellent teacher. Close observation and a first-hand study of men, and how they react to different influences, will all help.

Some men are fitted for one kind of responsibility, and some for another. Some can be leaders and some will always be followers. Some are promoters and others are care-takers. The executive, like the type-setter, must know where to place every letter, so that there will be no mistake in the finished story.

5. An active executive constantly gives out so much that he must make continual and liberal deposits in his own mental bank-account; otherwise he will soon begin to feel fagged and in serious need of a change. Moreover, his own work will be likely to fall into a rut, and he will be less observant and keen than he should be. Such deposits should be in the form of reasonable and enjoyable recreation; of inspiring contact with men of broad minds, and in the form of opportunities for enlarged vision through a knowledge of what big men are doing in a big way all over the world.

6. The figures of any business when honestly set forth are the index of its condition; but the same figures can be made to tell many different stories. It is the *truth alone* which makes us free; so let our findings be frequent and accurate, and let us face them in all honesty, whether they please us or not. The figures on the balance-sheet and the financial statement should be the arrows which will point to us without fail the direction of the safe, broad highroad to prosperity.

7. An executive who commands the respect of his associates is the one who understands,

in more or less detail, the actual working out of all departments under his supervision; also the close harmony and co-relation of these departments. Even though the executive readily entrusts the responsibility to others for the actual doing, yet through intelligent, frequent, fair and appreciative supervision all workers will be stimulated to make a better showing.

8. The forward-looking executive will know the possibilities of his organization and territory, and will aim continually to make his organization measure up to those opportunities.

It is one thing to be on the inside looking out, and another to be on the outside looking in. This double vision is very necessary in order to appreciate just what our opportunities, privileges and possibilities are. Sometimes it is an excellent plan to take a little time to get both viewpoints, and to look over the entire situation calmly, so as to keep a balanced and fair outlook upon our duty to others, and the duty of others to us. Service is the greatest thing in the world; but it need not be necessarily and entirely one-sided.

9. Love is the fulfilling of the law. Love is of two kinds—first, the love of a child for its parent, protector or benefactor for benefits received; second, the love of parent for child; of the philanthropist toward the needy and weak; of the reformer, missionary or crusader toward the oppressed or benighted.

We are adjured to love our neighbor as ourselves, and to do unto others as we would have them do unto us. In doing this, we must remember that we are dealing with human nature. Human nature is made up of hereditary instincts as old as the race; whereas experience is only as old as the individual. This means that the executive who handles men must have an intelligent understanding of psychology and human reactions to different kinds of influence. Knowing this with a fair degree of assurance, we can act more wisely and express true altruism in the most helpful manner. Much well-meant endeavor goes astray because executives do not understand as well as they should the instincts and impulses of the people with whom they deal.

10. An executive becomes the master of a situation only when he is in complete mental control of himself, and can direct his sub-conscious mind so that it will serve him reasonably well. Being in control of ourselves through contact with the Infinite, we can hold ourselves to a clear and intensive study of the "pieces" on the chess-board of business-life. And as we develop the skill which this makes possible, we can be sure of playing the kind of game of which we shall have reason to be proud.

Nothing just happens. Everything is the re-result definitely of cause and effect. Let us not forget that, and so strive for the control which will ensure the finest of result no matter what kind of business ours may be.

THERE is a certain beauty in a contrast of large and small. It is the opposite of monotony. For instance, compare a street where there is variety in the sizes of buildings and trees, with another of rows of dull, ugly blocks. Ranges of hills, spires and pinnacles, clumps of large and small trees, clusters of haystacks, illustrate this idea in landscape. ARTHUR W. DOW.

ALPINE SNOWS WILL CADBY

Copyright, Chas. A. Townsend

OTTER CLIFFS, MT. DESERT, MAINE

CHAS. A. TOWNSEND

EDITORIAL

When Art is Rubbish

THE professor of philosophy at a certain New England college declared, recently, that "art was all bunk and that tradition and fad, justified by snobbery and mysticism, formed the sole basis of artistic discrimination". Quite naturally, he stirred up a hornet's nest. What he probably meant was that art was "bunk"—as he called it—to many people devoid of æsthetic tastes or poetic imagination. This country teems with persons of that class, to whom good art in any form appeals in vain. If one of their kind should happen to look up into the brilliant, starlit heavens, at a gorgeous sunset or upon a winter-fairyland, he would remain quite unmoved. His mind runs in different channels—he feels a keen and steady enjoyment in his vocational (mercantile or industrial) pursuit, with ordinary sports as diversion. Nevertheless, such persons are absolutely indispensable to our material existence and are entitled to their opinion of the fine arts, however ungracious it may be. If they were to pretend to think otherwise on that subject, they would be simply insincere and hypocritical, and lay themselves open to ridicule.

A certain branch of the practice of pictorial photography is passing through a trying period just now; but it will not be long, let us hope, before it returns to sane methods of artistic expression. At the present time, discriminating art-lovers, when visiting exhibitions of pictorial photography, are asked to admire the experimental efforts in ultra-modern printing-processes executed by some ambitious workers, who, however sincere in a desire to express their artistic feelings, appear to lack the requisite technical ability. Their friends, not aware of this serious deficiency, fondly imagine the exhibitors to be masters of multiple gum or bromoil-transfer, mistaking pathetic attempts in manipulation for successful accomplishments in new fields of pictorial expression. The impression thus created among sympathetic but unsophisticated beholders is ingeniously promoted by friendly newspapers, and the news is circulated that so-and-so is an expert manipulator in multiple gum or bromoil, whereas in reality the reverse is true. No wonder, then, that critical observers at photographic exhibitions fail to be convinced of the "beauty of individualism" in a meretricious phase of modern pictorial photography—alleged works of art.

There are many workers who, in their eagerness to break away from the conventional, go to the other extreme and feel obliged to make apologies when they become the objects of ridicule or misapprehension, as may be seen by the following incident which occurred at a recent one-man show. Visitor: "This looks like the portrait of a handsome girl; but her face seems to be dirty." Her friend: "Hush! Don't you know that's one of those bum oils or something." "But look at that picture of a man smoking! Something seems to be missing." Replied her guide, soothingly: "Oh; you don't understand! That's one of those gums. The teeth are gone!" If the student insists on seeking inspiration from the works of painters, rather than develop an artistic individuality, he should select those of great painters—Velasquez, Rembrandt, Rubens, Van Dyck, Reynolds—avoiding like an epidemic the monstrosities of modern charlatans.

As in present-day painting and sculpture, this pretentious, capricious trifling, masquerading under the guise of art, is destined to be short-lived, and to be supplanted by open, sane and exalting utterances that shall fill the soul with delight—like the beautiful, sunlit landscape which makes a simple and direct appeal to man's divine intelligence. True, painting and sculpture are undergoing a period of capricious fanaticism as expressed through works that are singularly vague and weird—to say the least. According to reliable press-reports, the Mutual Salon of the Society of Independent Artists, held in Paris recently, was a wild orgy of painted and sculptured horrors. Triangular nudes and ugly, fat Venuses vied with males of egg-shaped heads and bloated abdomens, perspective and anatomy being wantonly distorted. It is, perhaps, revolting manifestations of capricious minds, the disordered, grotesque emanations of the brush and the chisel, such as these, which have provoked the ire of the obscure college professor and which truly disgust all lovers of what is genuinely beautiful in this world. If this is the case, we deeply sympathise with him. But let him and all discriminating art-lovers be of good cheer; for by and by there will be a general revival of what is wholesome, beautiful and exalting in art, and the whole civilised world will rejoice. With more conviction and less pretense, the loud braying of the ass will yield to the melodious notes of the thrush.

ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value $10.00.
Second Prize: Value $5.00.
Third Prize: Value $3.00.

Honorable Mention: Those whose work is deemed worthy of reproduction in later issues will be given Honorable Mention. This includes a certificate suitable for framing and a coupon which will entitle the holder to a credit of Fifty Cents towards a subscription to PHOTO-ERA MAGAZINE, or towards the purchase of photographic books listed with the coupon.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.

Prints may be regarded as ineligible for a competition if any of the following rules are not fully complied with by the contestant.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. All prints should be mounted on stiff boards. A narrow margin is permissible.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage in this letter. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data. Criticism at request.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other. Large packages may be sent by express, prepaid.

8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for two years thereafter.

Awards—Advanced Competition
Home-Portraits
Closed January 31, 1923

First Prize: J. Herbert Saunders.
Second Prize: Dr. T. W. Kilmer.
Third Prize: Kenneth D. Smith.

Honorable Mention: Geo. W. Case; Mrs. Wilfred E. Clark; Howard C. Cloyes; Robert Edgar DeLand; R. L. Edmonson; Ormison O. Hilborn; Dorothy Jarvis; W. X. Kincheloe; Frank Reeves; F. H. Rogers; Eleanor L. Smith; Mrs. M. B. Sowden; Mrs. Elsa B. Versfelt.

Subjects for Competition—1923

"Home-Portraits." Closes January 31.
"Miscellaneous." Closes February 28.
"Child-Studies." Closes March 31.
"Artistic Interiors." Closes April 30.
"Bridges." Closes May 31.
"Marines." Closes June 30.
"Landscapes with Figures." Closes July 31.
"Summer-Sports." Closes August 31.
"Parks." Closes September 29.
"Architectural Subjects." Closes October 31
"Domestic Pets." Closes November 30.
"Indoor-Genres." Closes December 31.

Photo-Era Prize-Cup

In deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize ($10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.

Competitors Should Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know?

This is often the reason why careless entrants wonder what has become of their prints. Let them be more careful in the future. We will do our part, gladly.

SISTERS — J. HERBERT SAUNDERS

FIRST PRIZE—HOME-PORTRAITS

Recovering Silver from Used Hypo-Baths

Owing to the small scale on which most amateur photographers work, it is hardly worth their while to trouble about saving their residues, from the point of view of economy. But many readers may be interested to know how they can make, if only as a matter of curiosity, a specimen of metallic silver from the contents of their used hypo-baths.

It is to the hypo-solution that by far the largest proportion of all the silver used in photography finds its way, says a writer in *The Amateur Photographer*. A comparatively small amount of the silver-bromide in plates and papers is converted into metallic silver to form the image, and the whole of the rest is dissolved away in the fixing-bath; and, unless the work is done on a large enough scale to justify saving such baths, is poured down the sink and lost. That it is not difficult to extract such silver from the hypo, the following experiment, which many amateurs will no doubt find worth the trying, should show.

The first stage is to collect the silver in the form of silver-sulphide. If we add some of the sodium-sulphide solution used for toning-purposes, to a hypo solution which has been used, the mixture at once goes black, from the formation of silver sulphide. The silver in this is that which the hypo dissolved out of the negatives or prints which were fixed in it. The quantity of sulphide is not important, provided we use enough; and we can easily see if this is the case by letting the black mixture settle. If, on adding a drop or two more sulphide-solution to the clear liquid above the black sediment, there is no fresh blackening, we have added sufficient.

The sulphide-solution may be that which has been used for toning. It is effective so long as it has its characteristic smell. If sulphide is to be bought for this purpose, the cheaper potassium-sulphide or "liver of sulphur" can be used.

The clear liquid can be decanted from the black sediment and thrown away, and fresh lots of used hypo put into the same vessel, and more of the sulphide thrown down; until there is enough of the brown sludge to take in hand for the extraction of the metallic silver from it. If a large quantity of silver-sulphide is thrown down, it should be dried, and then sent to the refiners, who will make an allowance according to the amount of silver in the black paste. The precipitate is not quite pure, and the amount of metallic silver present will vary with different samples. To recover the actual silver from the sulphide, further treatment is necessary.

It is shaken up with water three or four times, allowed to settle and the water poured off, and finally spread out on a saucer and put into the oven or allowed to dry spontaneously. When dry it is put on an iron-shovel and held in the fire until quite hot; and when it is in this condition the excess of sulphur which is present in it can be burned off by putting a light to it. The gray lumps which are left are almost pure silver-sulphide.

The sulphide must next be powdered and weighed, and is then mixed with one-fifteenth its weight of powdered aluminium, such as is sold for aluminium-paint. A fireclay crucible, which can be bought from a dealer in chemical apparatus for a few cents, should have some of this mixture placed in it. The crucible should not be more than half full when its contents are well shaken down, as the action is a very energetic one.

The crucible is then picked up with the tongs and

MOTHER AND CHILD — DR. T. W. KILMER

SECOND PRIZE—HOME-PORTRAITS

put in the middle of a good hot fire; if necessary, using the bellows so that it gets red hot. When this is the case, the crucible may be taken out and allowed to get cold, after which it is broken up and the contents put into water—out-of-doors, as they give off sulphuretted hydrogen. Among the fragments in the water will be found a globule of metallic silver, which should weigh a little more than one-half what the sulphide weighed before the experiment.

A Photographic Glossary

BROMOIL.—A process wherein a certain proficiency in "hopping" is required. Probably originated in Kent.

CARBRO.—This process represents one of the triumphs of modern photography. By its aid porous plasters may be converted into pictures with almost ridiculous ease.

DARKROOM.—Considered indispensable by some photographers, but actually designed to conceal the expression of the operator's face when he discovers that he had forgotten to draw the slide before making his most important photograph. It is confidently expected that science will evolve some method by which his language will be subdued in an equally efficacious manner, pending which discovery the walls should be sound proof.

DESENSITISERS.—Said to make plates "reddy" for daylight development. Popular among photographers whose nervous tendencies will not allow them to work in the dark. To be used successfully, command of facial expression is essential. (See also definition of Darkroom.)

DISHES (PORCELAIN).—Strongly recommended by manufacturers, as they are so easily breakable. We have known members of societies to have a strong predilection for placing them upon shelves which do not exist. The resulting crash when the dishes strike the cold and unsympathetic floor is guaranteed to break the treasurer's heart.

EMULSION.—Not to be confused with "Scott's" or other nursery brands. For photographic purposes it is generally spread upon pieces of glass. Fairly docile when dry, yet when wet will develop gymnastic proclivities of a high order. Contrary to popular opinion it cannot be roasted before the fire and boiling is fatal.

ENLARGER.—So called on account of the facility with which this instrument can transform harmless pinholes into large and imposing blobs. By this means an English rural picture is easily turned into a representation of a volcanic eruption, where chunks of lava whirl through the air with frightful realism.

EXPOSURE-METER.—A most indispensable article. It is generally used after the operator has exposed all his plates, when it informs him that the whole batch is hopelessly "under."

HYPO.—A harmless-looking substance, but when in solution it has a playful way of shedding the label from its bottle and taking on the appearance of Metol-Quinol. We know a man who put an exposed plate into a bath of hypo and confidently awaited "developments." Not until after 15 minutes had elapsed did he realise what a "fix" he was in.

LANDSCAPE.—This is a popular compound consisting

NATALIE — KENNETH D. SMITH

THIRD PRIZE—HOME-PORTRAITS

of an unlimited quantity of fresh air, half-a-dozen assorted trees, umpteen sheep and several "bars of Sunlight."

Reflex Camera.—He who carries this instrument is filled with inspiration and covered with perspiration. Some of our leading workers have had their machines fitted with wheels and are now using them for caravanning purposes, in which cases the mirror has proved quite useful. The strain upon the pair of horses required for traction purposes is very severe, and we understand that the N.S.P.C.A. will move in the matter.

Safelight.—The surest and quickest medium for fogging plates of any description.

Solutions.—These supply other handy methods of spoiling plates and paper.

Three-Color Process.—A very delicate process in marked contrast to the language of its misguided adherents, this being of the strongest possible description. The quality of adjectives used is no doubt responsible for the term "three color," but from close observation it can be stated the said adjectives show all the colors of the spectrum in addition to several unknown ones.—A. W. Tack, in *The Club Photographer*.

Faded Bromide Prints

Since the introduction of sulphide-toning, says a British cotemporary, an idea has become prevalent that, as sulphide of silver is a fairly stable compound, therefore toned bromides may be regarded as practically permanent. Although they are less likely to change than untoned prints, they cannot be regarded as invariably quite permanent. We have noticed a decided weakening in very carefully made prints after a year or two, and in casually inspecting a frame of sepia postcards the other day we saw several which, owing to condensation upon the covering-glass, had faded in patches from a rich warm sepia to a sickly yellow. It may, of course, have been the case that other chemicals than those of the customary bleach and sulphide had been used. As far as our experience goes, prints toned in hypo-alum to a purplish brown or printing-out paper color appear to be more permanent than those toned to a warm brown. Some papers will not tone to a real sepia in a single bath. It would be an interesting and profitable field for experiment if the subject of sepia-toning were investigated in respect to the permanence of the results.

SUBJECT FOR NEXT COMPETITION

ADVANCED WORKERS

EAST RIVER — WM. B. IMLACH

EXAMPLE OF INTERPRETATION

Advanced Competition—Bridges
Closes May 31, 1923.

To him who has the eyes to see and the heart to understand, a bridge reveals many things. We know that if we do not adjust a radio receiving-set to the correct wave-length of a certain sending-station, we fail to hear and to enjoy the beautiful music that is all around us. So it is, in a measure, with our pictorial appreciation of bridges. Some bridges may be large and impressive, others small and quaint; but the camerist who is attuned to pictorial beauty wherever it may be will see and understand. There are many new bridges in existence today that are marvels of engineering skill and, in addition, are architecturally beautiful. Certainly, our readers in New York City have abundant material at hand in the magnificent bridges that span the East River. Other cities have splendid bridges, and even small towns, villages, as well as public and private parks, may boast of bridges that are historic, quaint or picturesque. Those of our readers who have been fortunate enough to travel extensively in this country and in Europe, will know that bridges have an individuality that often lends itself to delightful artistic treatment.

There are bridges of stone with great arches, suspension-bridges of spider-like construction, and those of steel. Then, there are old-fashioned wooden bridges and modern ones of solid concrete and, last but not least, the simple structures that span running brooks along the highways and byways. The pictorialist may choose what he will. In each, he can find that which will test his skill and enable him to make a picture of permanent pleasure to himself and to his friends. A bridge is not always a thing of stone or steel. It embodies a human element that cannot fail to stir the beholder. Who will say that the world-famous Brooklyn Bridge is not an expression of man's daring and engineering skill? Is it not throbbing with life and interest? Does it not convey its message daily to many thousands who must realise that it is a beautiful monument to its builder? Then, too, as we see it in sunshine and storm, by day or by night, does it not stir us with dramatic appeal? Yes; a bridge does have an individuality, and the camerist need seek for no finer subject for a pictorial masterpiece.

Obviously, there is a correct point of view from which a picture of any bridge should be made. Where conditions will permit, a viewpoint should be chosen that does not show the bridge passing straight across the picture-space. Nor should an arch or span be placed directly in the center. Often the approach to a great bridge is of greater pictorial value than an attempt to include the entire structure. Of course, in the case of some quaint, rustic bridges it is possible to choose any one of a number of viewpoints that will lend themselves to pictorial treatment.

In this competition, it will be possible for the camerist to send in a picture that truly represents the type of bridge to be found in his part of the world. Those who live in large cities have the opportunity to portray the immense bridges that are known internationally. On the other hand, some of the old-fashioned bridges to be found in the rural districts possess a charm and an appeal that even a great suspension-bridge may lack. Aside from the attractiveness of a bridge, there is the added interest which comes from the study of its architecture and of its type of engineering.

Although I have referred to the Hell Gate Bridge a number of times, I feel compelled to mention again how awe-inspiring it was to watch that tremendous steel-arch grow, section by section, from opposite sides of the river, until finally the halves met and became one, high in the air over the turbulent waters of Hell Gate. The pictorial and dramatic appeal of this remarkable and beautiful bridge impressed itself so firmly upon me at the time that I shall never forget it. Then there is the other extreme. A rustic bridge across a brook, reflections in the quiet pools and a feeling of peaceful contentment. Who will say whether the mighty steel-arched bridge or the humble wooden one serves man best? There are times when the contemplation of a quiet scene of pictorial beauty serves better than the rush and roar of a great city to help us plant our feet firmly on the road to renewed courage and hope. It is for the pictorialist to sense these feelings and with his camera to reveal them to others.

Virtually any type of camera may be used to make pictures of bridges, although in certain cases special equipment may be necessary to obtain the most satisfactory results. The modern hand-camera with its anastigmat lens and accurate shutter enables the pictorialist to work advantageously in nearly all conditions of weather. Soft-focus lenses may be used in many cases to soften the harsh lines of a bridge or to give atmosphere to a vista seen through or beyond a span of steel or stone. The worker will have to decide when to use a color-screen or when to rely solely on the orthochromatic qualities of the film or plate. The time of day and season of the year are important factors and also whether or not shipping and traffic necessitate a short exposure to prevent blurring. In most cases, the hand-camera will prove to be equal to the task; and whatever corrections may be necessary can be made subsequently in printing or enlarging the negative. Often, the enlarging of only a part of the negative will give just the desired effect.

In the making of pictures of bridges, there is an excellent opportunity for the worker to gain much valuable information with regard to bridge-building and engineering. In the case of the Hell Gate Bridge, the story of its construction reads like a romance. This may be said of the Brooklyn Bridge and of hundreds of famous bridges in all parts of the world. Surely, if a bridge is worth photographing, it is worth the time to learn something of its history and of its architectural character. If the camerist will apply himself to the study of bridges, he will not only obtain many satisfactory subjects, but he will increase his knowledge, and that is what each one of us can do with profit. There are a number of excellent reference-books on bridge-construction and engineering which may be obtained from public libraries. They will be of much interest to the pictorialist who is eager to base his work on a thorough knowledge of all the facts. Of course, in the case of bridges, in rural or unsettled parts of this country and elsewhere, the engineering-problems involved often give place to a study of the historical facts that are associated with a particular bridge or the site upon which it stands. For example, the bridge at Concord, Massachusetts, is not to be regarded as remarkable architecturally or as a piece of unusual engineering-work; but who will deny that this bridge—or rather the spot upon which it stands—is not hallowed in the heart of every true American? The spirit of 1776 is still strong, and we remember well those rugged farmers who there "fired the shot heard 'round the world" which resulted, eventually, in the creation of the United States of America.

Indeed, it should not be assumed that the majestic suspension-bridge is any more to be desired than the humble, wooden bridge across a trout-stream. Each has its place and its own appeal. Upon the pictorialist depends the selection, and this may be controlled to a great degree by environment and taste. However, I wish to point out that any type of bridge will be acceptable, provided the camerist produces a well-composed, artistic and attractive print of it. Record-pictures aplenty may be obtained of well-known bridges, but this competition is designed to encourage the camerist to make pictures that are individual, pictorial interpretations of bridges with which he is well acquainted and of whose history he has made a careful study. It is worthwhile to go into this matter thoroughly, because not only the pictorialist, but each of us, will learn and profit by the thought and time given to it.

It might be well to repeat the suggestion of H. P. Webb, who advises the camerist to walk around his city or town so that he may become familiar with the available subject-material. By so doing he will save much time when he is in search of some special subject. In these busy days, time has much to do with the doing or not doing of a certain thing. If the worker knows where to go for a good picture of a bridge, in all probability he will go and enjoy the experience. However, if he must first find a bridge, his enthusiasm may diminish to the vanishing point. Such is human nature.

Let me urge our new readers and subscribers to send prints and to take active part in this—and all our competitions. We all learn by practice and by doing things. Whatever problems may confront the camerist in this competition, he is certain of one thing, viz., that his subject will not move or run away during the exposure. For this very reason, he has the time and the opportunity to compose the picture carefully and to obtain whatever effects may appeal to him. It is an excellent competition for our new subscribers to enter for that very reason. We welcome them and their pictures. No matter how many books we read on composition, developing, printing and enlarging, there is nothing like the acid-test of actual performance to prove how much we really know. Photographic reading should go hand in hand with *real* photographic work; then you have the right combination which leads to success. As I have said many times, we are all deeply interested in these competitions, because through them we improve our knowledge of photography, of humanity and the wonders of nature. What a splendid hobby or profession photography really is for the person who learns to make the most of it! A. H. B.

BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value $3.00.
Second Prize: Value $2.00.

Honorable Mention: Those whose work is deemed worthy of reproduction in later issues will be given Honorable Mention. This includes a certificate suitable for framing and a coupon which will entitle the holder to a credit of Fifty Cents towards a subscription to PHOTO-ERA MAGAZINE, or towards the purchase of photographic books listed with the coupon.

Subject for each contest is "Miscellaneous".

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Prints may be regarded as ineligible for a competition if any of the following rules are disregarded.

Rules

1. This competition is open only to beginners of not more than *two* years' practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition
Closed January 31, 1923

First Prize: R. A. Cecchini.
Second Prize: G. H. Graves.

Honorable Mention: John James Griffiths; Margaret E. Kosko; Philip Mehler; Reynold J. Palmer; Stanley Shiner.

It Is Not Always the Camera

FOR a number of years, in this department and elsewhere, I have tried to impress my readers with the fact that a camera is only as effective as the skill of the person behind it. If this were not so, why do we see first prizes won with moderate-priced outfits? It should be remembered that a hundred-dollar camera in the hands of a man with a Brownie photographic education will not and cannot deliver hundred-dollar camera-service. Why? Because the man with limited experience does not know enough to get his money's worth out of the hundred-dollar outfit. In other words, the fact that the camera cost one hundred dollars in no way whatever guarantees photographic success.

Let me illustrate. A few weeks ago, we in Wolfeboro, New Hampshire, held our second annual winter carnival with the customary ski and snow-shoe races, ski-jumping, ski-jöring, tobogganing and cross-country hiking. The day was exceptionally clear and bright. The winter-sport committee had announced a special photographic contest for pictures of the carnival-events. As a result, a large number of cameras of all sizes, makes and prices were in evidence. As a member of this photographic committee, I was very glad to be of service to those camerists who might be uncertain with regard to the best stop and shutter-speed to use. As I moved through the crowd, I came upon a gentleman with a brand-new eighty-dollar camera, equipped with an F/6.3 anastigmat of well-known make. The snow-shoe races were being announced. Seeing me with my camera, he held out his new equipment for my inspection and asked, "Have I got this thing set right for the races?" I looked; and to my amazement he had the lens stopped down to F/8 and the shutter set at 1/25 of a second. The contestants in the race would pass him at right angles and within ten feet of where he stood. Without a doubt the resulting pictures would have shown blurred figures. Mind you, the sun was shining brightly and at his back. That eighty-dollar outfit in his hands was no better than a camera with an F/8 rapid rectilinear lens and ordinary shutter. I explained to him that he was not getting his money's worth out of the camera by using it in that manner. I suggested that he open the lens to F/6.3 and set the shutter at 1/200 of a second. Moreover, we paced the distance to where the racers were to pass and focused the camera on that particular spot. I left him and went my way. The next day, I met him again. Naturally, I was interested to know what success he had had with the new camera. "Got some bully good pictures, after I met you," he replied heartily.

CLOUDS AT SUNRISE — R. A. CECCHINI

FIRST PRIZE—BEGINNERS' COMPETITION

"Funny I didn't think about the lens and shutter. Couldn't find my instruction-book anywhere; just guessed at it. Much obliged for the tip." I venture to say that if the results had been different, he would have condemned the camera and the dealer who sold it to him. In some way he appeared to have the idea that an expensive camera was like a life-membership in a club—no further dues or requirements, photographically speaking, were to be expected. Obviously, this is not and could not be true, as many learn to their disappointment. Constant study, practice and observation is the price of photographic success.

On the same occasion, there were a number of winter-sport enthusiasts who were photographing the ski-jumping with small box-cameras. In every case, the figure of the ski-jumper was a blur and the owners of the box-cameras "cussed" photography in general and their cameras in particular. There was nothing the matter with the cameras; but too much was expected of them. The average box-camera was never made to photograph a subject in rapid motion. Nothing less than a reflecting-camera with an F/4.5 anastigmat lens would have "stopped" the ski-jumpers from the point of view selected by the owners of the box-cameras. Later on, when the unsatisfactory results were shown to me, I explained that another time a different type of camera should be used, or better, no attempt should be made to photograph ski-jumping with a box-camera unless at a distance and at a favorable angle. Right here, let me say that I do not wish to go on record as saying that a box-camera cannot photograph ski-jumping. From past experience I know that were I to make any such statement, some reader would take special pleasure to send me a good print of ski-jumping made with such a camera. However, I do say that another type of camera is to be preferred; and that with it the prospect of success is greatly improved.

A number of times in my experience, I have received complaints from camerists something like this: "In this mail I am sending you some prints which I wish you would look over. I think they show conclusively that there is something the matter with my camera. I paid fifty dollars for the outfit and it ought to make better pictures than that." Usually, the result of the inspection was clear proof that the owner of the fifty-dollar camera did not know how to use it. Either he made every exposure at F/6.3, barring none, or he set the shutter for 1/200 of a second and stopped down to F/16, or he moved the camera when he made the exposures, or he covered part of the lens with his finger when he released the shutter, or he photographed the subject with the focus set at twenty-five feet instead of ten, or he attempted to make pictures long after sundown, or—but why continue the list. The best of us have been through such an experience in our own tyro-days. I remember this fact—and I sympathise accordingly. However, in all fairness it must be said that in nine cases out of ten the camera itself is not to be blamed, but the user thereof. It is human nature to evade responsibility and whenever possible to "pass the buck." As a rule, when the entire situation is gone over with the disgruntled "owner of a fifty-dollar camera," he is compelled to admit that very often he is responsible for the unsatisfactory results. Of course, there are times when a camera, lens or shutter is not working properly and when results cannot be obtained, even with the aid of an expert; but I venture to say that very few new, standard outfits fail to give satisfactory results when used properly. Therefore, the point of this little article is to caution the beginner to avoid the fallacy that merely the purchase of an expensive camera will make him immune from photographic failures or ensure him a place in the leading salons. Also, let him not expect too much or too little from his outfit. Let him find out just what he can or cannot do with it. Lastly, let him make sure that he is not at fault when things go wrong with a brand-new, *de luxe* camera. "Know thyself," photographically, and the door of camera-success is half open.

A. H. B.

THE ROAD THROUGH THE VALLEY — G. H. GRAVES

SECOND PRIZE—BEGINNERS' COMPETITION

The Magic Touch of Night

WHO, asks a writer in *Kodakery*, has not been an interested observer of the changes that occur in the appearance of the landscape as day gradually merges into night? After these changes have taken place many scenes that seemed commonplace under the noonday sun are made attractive by the feeble light which reveals their outlines without disclosing details.

The magic touch of night is sometimes emphasised by the moon, and it is always accentuated wherever electric lamps place highlights on interesting outdoor-scenes. These highlights are the important tones that, when contrasted with the other tones which we can see in objects at night, make outdoor night-photography by electric light a pastime of special interest. Without the highlights the subjects might be suitable for a photographic record, but it would not make a picture.

The presence of snow greatly simplifies our outdoor night-work. It is on the snow that the light of nearby lamps places highlights, and it is the shadows on the snow that form the halftones for our picture. The blacks, which are needed to make a night-picture look like a real night-scene, always exist wherever dark objects, such as buildings, fences or trees, are included in the foreground of the view.

Subjects abound in every city and village where the streets and parks are lighted by electricity. Nearby lamps should never be included in such pictures. They mar the pictorial effect.

As time exposures must be given, it is necessary to use a tripod, or place the camera on some rigid support. The exposures that have given splendid results have ranged from 5 to 20 minutes, with stop No. 4 F/8 or F/7.7 on anastigmat lenses; and from 10 to 40 minutes, with the largest stop on single-lens cameras.

To Apply Light or Dark Inscriptions to Negatives

ALONG with several already well-known instructions to apply inscriptions to negative-coatings, the *Zeitschrift für Reproductionstechnik* gives the following to produce unreversed *white* figures or lettering on the positive prints: The inscription is first written in aniline black on a dry strip of gelatine. When the writing is completely dry, the place on the negative where the inscription is to go is moistened and the two are pressed closely together for a short time; this transfers the writing to the negative in reversed order and shows on the print in white. If it is desired to have the inscription printed dark on the positive the following procedure is observed: Write the inscription on a strong piece of paper with a saturated solution of potassium ferricyanide and allow it to dry completely; then moisten the negative in the place where the inscription is to go—at a place where the print will be light—keeping the paper with the ferricyanide writing pressed closely to the negative for about five minutes. When the paper is removed from the negative the reversed writing will show clearly. Now place the negative in the fixing-bath until the silver ferricyanide is dissolved and the writing becomes transparent; on the print it will naturally show in dark color or black.

Art-Instruction.

SHE—"What a color Miss Fair has to-night. I wonder if she paints."

HE (observing Miss Fair surrounded by an admiring circle)—"I don't know. She certainly draws well."

Exchange.

THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY

Dissolving Amidol

To open a bottle of amidol, weigh out so many grains, and dissolve it in any room where plates, papers, negatives or prints are kept or handled, means risking the appearance of a beautiful crop of maroon-colored spots at an early date. In fact, the keeping of an opened amidol bottle or a pair of scales in such a room may cause a regular occurrence of this trouble. After suffering at various periods, I hit upon the following dodge to avoid it. The water is heated in a large enamel-boiler, and the sulphite and preservative dissolved completely before touching any amidol. Then a full ounce-bottle is submerged in the sulphite-solution, and with the clean, small blade of a penknife, the cork is removed under water. By moving the bottle about in the solution, all the amidol will be taken up without any possibility of the salt getting into the air. The formula which lends itself to this treatment is as follows:—

Water (hot) about	40 oz.
Glycollic acid	10 grs.
Soda sulphite	10 oz.
Amidol	1 oz.

(new bottle each time)

Pour into a Winchester bottle, fill up with water, and use 1 part to 1 of water. This formula will keep. Bromide is optional, but may have to be calculated according to the papers used.

The ounce-bottles may be objected to by large buyers or consumers, who are used to the pound-size; but the advantage is so great that this disadvantage is outweighed. Of course, the best way of all to make up any solution is to do it in a special room, into which no plates, prints, or other photographic "tackle" ever go; but this is not convenient everywhere. Another detail which may need mention is the advisability of removing colored labels, cork, wax, etc., before submerging a bottle. Using Johnson's amidol, I have not found it necessary to remove anything, submerging the bottles just as they are bought but, of course, the dodge may appear abortive if dirty benches or opened bottles are near at hand, as traces of amidol on them still cause trouble.—THERMIT, in *The British Journal.*

Pinakriptol—A New Desensitiser

THE gift made to us by Lüppo-Cramer in the safranin developing-method is one of the most wonderful surprises which photography—never lacking in marvels—has brought us, and in view of the advantages it offers to photographers generally, no wonder that the discovery was welcomed cordially in every civilised country, says Dr. E. König in *Photographische Rundschau.*

After the first excitement was over, complaints began to be heard that the red discoloration of trays, measures, fingers, nails and plates could not be removed, and particularly from Japan came the cry that safranin could not be used on films because it discolored the coating too strongly. After many tests we were obliged to admit the validity of this reproach, finding that the layer between the celluloid and the silver-bromide coating, consisting mostly of chromated gelatine, absorbed the color strongly, and this could not be removed even by the use of nitrite. This strong discoloration, however, is the only objection made to the safranin-method, if one can overlook the comparatively harmless discoloration of the trays, etc.; but with certain films the trouble is so important that they must be excluded from the use of safranin.

Although the property of desensitising was observed first in dyes, it was pointed out that this characteristic is not by any means limited to them. After the tests, above mentioned with the intense red safranin, it seemed of practical value to seek a colorless or at least a weakly-colored desensitiser, and we soon had the good-fortune to find a whole series of substances possessing the same desensitising properties as safranin with the advantage of almost complete absence of coloration. These substances had the only drawback that the "narkose" of the sensitised plates is somewhat slower in taking effect than with the safranin and that development was slightly retarded. Fortunately, at the same time, we found, in a very different chemical class, a basic dye that showed an extremely strong desensitising-power, and although of a dark-green color it has scarcely any affinity for vegetable or animal-fibres—such as human skin. The drawback to this dye is that it also strongly discolors the developer. The slight green coloration of the gelatine-coating is, however, quickly and completely eliminated by washing.

From among the large number of desensitisers found by us, we have selected two substances which, when mixed, happily combine the advantages without the drawbacks mentioned above. This mixture, which the Höchst Dye-Works has placed on the market under the name of "Pinakryptol," forms a greenish gray powder which in its effect resembles closely the phenosafranin and is used in a solution of 1 to 5,000 which does not discolor either the fingers, nails, trays or gelatine.

Uvachromie

UVACHROMIE is a three-color process and, therefore, presents nothing especially new; but the plates possess a very high degree of panchromatism. With the use of special filters it is possible to expose each of the three plates in the same length of time, which is a great advance over other panchromatic dry-plates. By using these plates and their corresponding filters, errors in exposure are reduced to a minimum. Their general sensitiveness is very high, so that in spite of the filters, instantaneous pictures can be made in the open, when light-conditions are favorable. A special apparatus has been constructed to expose the plates, so that the three exposures can be made in less than three seconds, as the changing of plates and filters is entirely automatic. It is particularly important for the makers of natural-colored postcards, as well as for colored illustrations for catalogs, etc., which can be photographed with great facility. To produce the halftone-plates three diapositives are made from the three negatives and from these, in turn, the screen-

negatives are made. Any photographer can make the three-color negatives; the photo-engravers prepare the color-printing plates.

With the patented Uvachromie-process it is possible also to produce with comparative ease from three-color negatives, in the true natural colors, diapositives called "Uvachromes." This is done by changing chemically the black diapositives, which are made on thin films, and coloring each with its appropriate dye; the films are then cemented together and can be projected on a screen. In view of the failure of the Autochrome in this field, we would warn the public nor to expect too much from this process.—*Das Atelier.*

Toning Developed Prints with Nickel and Cobalt

It is not generally known that salts of nickel and of cobalt can be used to tone bromide and chloro-bromide prints; but nickel chloride, especially, gives very fine tones and is very easy to handle. The tone varies from a deep, warm brown to a red, similar to that produced by copper-sulphite; but the intermediate tones are much more pleasing. The whites, too, remain quite pure when toning is not protracted too long. Cobalt gives a violet-rose tone, very effective for portraits; but is only successful on rather hard prints.

The composition of the baths is very simple and the proportions of the salts seem to make very little difference in the result. As an indication the following formula may be used:

A.	Water	16 ounces
	Potassium ferricyanide	10 grains
	Potassium citrate	15 to 20 grains
B.	Water	16 ounces
	Nickel chloride	10 grains
	Potassium citrate	15 to 20 grains

For use, mix the two solutions; if the mixture is turbid, add a little potassium-carbonate until clarified. Increasing the quantity of nickel-chloride gives a darker brown. This bath keeps for some time.

For cobalt, bath B is replaced by:

C.	Water	16 ounces
	Cobalt nitrate or chloride	15 grains
	Potassium citrate	40 to 60 grains

Bulletin de la Société Française de Photographie.

Still Another New Desensitiser

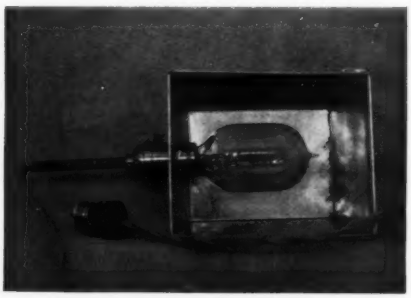
Besides their "Pinakryptol" desensitiser the Höchst Dye-Works have just placed on the market a second desensitiser under the name of "Pinakryptol-green," which is claimed to surpass the pinakryptol in many respects, of which the latest sensitiser is the green form. This dye, says a German cotemporary, was at once recognised as a remarkably effective sensitiser, whose only objectionable feature is its dark green color. The article was brought to the attention of a number of experts for their opinion, which was so favorable that in spite of its dirty green color, it was decided to offer it to the photographic world.

The advantage of the Pinakryptol-green over the Pinakryptol consists first in its stronger desensitising-power that is recognised by the more rapid entrance of the "narkose" of the photographic plate; it is besides much more soluble in water. It has the same advantages over the phenosafranin as over the pinakryptol, its only disadvantage being its dark color. This is, however, of little importance, as the gelatine-coating of the plates and films is not discolored.

An Inexpensive Portable Portrait-Lamp

The complete cost of this lamp is $5.75 and it may be built by any one who can use a soldering-iron. If you cannot use a soldering-iron, your local tinsmith can do the small amount of soldering required in a few minutes. The parts necessary are: a 400-watt photographic blue bulb (which will cost $4.50); a tin bread-pan 3½ inches deep, 6 inches wide by 9 inches long (cost 10c.); a pushbutton socket (cost 35c.); a 4-inch piece of ⅛-inch gas-pipe, threaded on one end (cost 5c.); ten feet of extension-cord (cost 50c.); and an attachment-plug (cost 25c.).

The pan will have to be rebuilt so that it will be 7 inches long. This is done by cutting off one end of the pan 1 inch from the end; then cutting off another inch from the larger part and placing the two sections together, so that there is a 1-inch lap on the outside, and solder them together. In the middle of one end, cut a round hole, ½ inch smaller than the outside shell of the socket. Then cut about six or eight slits



¼ inch deep in the edge of this hole and bend up the edge. This will form a collar to fit around the socket. The socket is now placed in the hole and the collar is bent back against it and the whole soldered together securely. Screw the ⅛-inch piece of gas-pipe into the socket, thereby forming a handle for the lamp. Attach the wire to the socket and plug and the lamp is complete, as shown in the illustration.

To use the lamp for home-portraits, it is held about 18 inches above and to one side of the subject and then moved to the opposite side and below the subject's face, in order to eliminate harsh shadows. If an F/4 lens is used with Eastman's Par Speed Portrait-film, the exposure should be about two seconds.

This lamp may also be used to make interiors. By keeping the lamp moving, *i.e.*, using the lamp as a brush with which to "paint" the light, all harsh shadows may be avoided. Care must be exercised at all times not to throw the direct rays of the lamp into the lens.

Charles W. Quint.

Blackening Brass

To blacken the brass-work of cameras and similar fittings of the same metal *Popular Mechanics* gives the following directions: Clean the pieces thoroughly, so as to free them entirely of grease, and dip into a solution composed of 200 gr. of copper nitrate to the ounce of water. After allowing them to remain for a few minutes in the bath, remove and heat until the desired color is obtained.

ANSWERS TO QUERIES

H. L. M.—**Pyro-metol developer is very likely to give strong negatives** because of the amount of stain that occurs in the image. This developer is not so well suited to portraits on this account. We think that you will do much better to use the ordinary pyro-soda developer that is recommended by the makers of the dryplates you are using.

A. H. A.—**A suitable adhesive for affixing film-negatives to glass** is made by dissolving gelatine in its own weight of glacial acetic acid. Apply a little of the mixture to the corners of the film, press into contact and allow to stand for thirty minutes, when the negative will be ready for printing.

F. P. S.—**The famous portrait of Elisabeth Bas** in the Rijksmuseum at Amsterdam, until 1912 attributed to Rembrandt, was the subject of a superbly illustrated article by W. H. Idzerda, published in PHOTO-ERA MAGAZINE, 1912, and shown to be the work by Ferdinand Bol, and not by Frans Hals, as you seem to think. Being an art-student, you will naturally be interested in that remarkable *exposé* made possible by photography. The series of photographs which accompany Mr. Idzerda's sensational story are excellent and convincing, and well worth your critical examination.

F. W. P.—**No attempt is made to obtain a wholly sharp focus** for objects at all distances when making what are known as "fixed-focus" cameras. The cameras are sharply focused on the nearest point to the camera which will still enable distant objects to appear approximately sharp in the pictures, and in this way objects in the middle distance are perfectly sharp, and near objects are also sharp, provided they are not too near.

M. F. D.—**The best way to ensure complete fixing** is to use two fixing-baths, and to transfer the negatives or prints to the second bath after they have been fixed in the first. Then, when the first bath begins to show signs of exhaustion, it should be replaced by the second and a new clean fixing-bath should be used in place of the second bath again.

O. S. Y.—**A two-solution developer** is simply a one-solution developer split into two parts, one containing the carbonate and bromide, the other containing the developing-agent and preservative so that the developer will oxidise less readily and therefore keep well. The reason why it is customary to keep a developer, like pyro, in two solutions, is because pyro oxidises much more readily than Elon or paramidophenol with a given amount of preservative.

E. A. M.—**Two methods of keeping a record of exposures** have been lately printed in PHOTO-ERA MAGAZINE. The first one, "A Photographic Exposure-Record," by Henry J. Sihler, appeared in the November, 1922, issue. The other one, "I remember, I remember," by B. Patang, appeared in the December, 1922, issue. You might look the articles over and adopt the one best suited to your needs.

E. C. P.—**To count seconds without a watch** it is usually correct enough to use the words "one hundred and one," as rapidly as clear enunciation will permit. The last word of the sentence should always indicate the number of seconds that have been counted. For instance six seconds should be counted, "one hundred and one, one hundred and two, one hundred and three, one hundred and four, one hundred and five, one hundred and six." Although this method is reasonably accurate for short time-exposures, long time-exposures should be timed with a watch whenever possible.

B. R. S.—**Avoid including an objectionable telephone-pole or tree-trunk** in front of a building by making two views of the latter from two viewpoints not far apart, joining the two prints and then making a negative of the latter. This clever dodge is fully explained and illustrated by two photographs in an article by William H. Blacar in PHOTO-ERA MAGAZINE, November, 1916.

EMMA R. J.—**Photographs of trees, especially in a forest.** This subject has been treated, with suitable illustrations, by William S. Davis, in PHOTO-ERA MAGAZINE, July, 1912. Also, during the past sixteen years, there have appeared in the magazine from time to time, superb full-page pictures of trees and wood-interiors by the well-known photo-pictorialist, Theodore Eitel. It will repay you to look up these back-numbers of PHOTO-ERA MAGAZINE.

A. J. V.—**Bromoil brushes may be cleaned** with several different liquids. Gasoline will do the cleaning, but is apt to leave a greasy deposit on the bristles, and this is sometimes enough to interfere with the inking when the brushes are next used. A liquid which evaporates much more completely is carbon-tetrachloride. This has the added advantage of being incombustible, hence safer to use around the studio or darkroom.

B. M.—**Indoor portraits with window-backgrounds** can be made on sunny days in the winter, as well as in the summer-time, with exposures as short as 1/10 of a second, if the largest stop on an F/4.5 lens is used; but as 1/10 of a second is long enough to record movement it is necessary that the subject be quiet. Without a reflector, the shadow side of the face will probably photograph in too dark a tone, so that a white reflector not less than three or four feet square should be used to lighten the side of the subject farthest from the window. This reflector should be four or five feet from the subject and the top should be a little higher than the subject's head.

ELLA M. B.—**A reliable and up-to-date book devoted to the subject of coloring photographs** is yet to be published. A series of admirable articles, by B. I. Barrett, an expert photo-colorist, was published in PHOTO-ERA MAGAZINE, December, 1907, Jan., Feb., March and April, 1908, which will be found practicable and adaptable to present-day printing-papers. It can be consulted at most Public Libraries and the leading camera-clubs. Also, the principal manufacturers of water- and oil-colors supply *with their outfits* a book of instruction which will enable almost any one to color successfully photo-prints on bromide and printing-out papers. They are the Roehrig Transparent Oil Photo-Colors, Marshall's Photo. Oil-Colors and the Japanese Transparent Watercolors.

OUR CONTRIBUTING CRITICS

CONTENTMENT — DE WITT H. THOMPSON

YOUR CRITICISM IS INVITED

***Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to* PHOTO-ERA MAGAZINE.**

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

THE legal gentleman who took this picture remarked that he might get heart failure if any critic said anything good of it.. Well, I think every candid critic will admit that the two birches are very well rendered—exquisite, in fact. But, to use legal phraseology, the leaning birch is an irrelevant side issue that distracts from the main issue and should be stricken from or never have been allowed in the record. The learned counsel has also introduced a road that draws the jury's attention away from his main contention, which is the birches. There are also suspicious possibilities in his background that need elucidation; he should have enlightened the jury further as to its true relation to the point under consideration of the court.

Or, photographically speaking, we have here a case of divided interest between the road and the birches. The foliage in the background is greatly underexposed, and the grass is only grass by courtesy. The spotty effect of the sky between the trees in the background is painful. The photographer says that he gave one second at F/16 with a three-time color-screen at 10 A.M. on a hazy day, in September. If he will take the trouble to work out that exposure in, let us say, Burroughs-Wellcome Exposure Diary, he will find that he ought to have given about three seconds instead of one second.

E. L. C. MORSE.

THE figure of speech in the English language allows one to name a part for a whole; but one should not take too much liberty. That Mr. Neville has given us a close-up of birch tree-trunks we shall concede; but, for my part, that doesn't picture birch-trees any more than a photograph of four legs would picture a horse. By underexposure he has made the white trunks stand out prominently enough—too prominently, in fact, and the bit of curved roadway and broken pattern of sky which filters through the foliage makes me suspect that he did not capture the scene which he saw. The birches are well placed and the composition of the print is interesting; but the black mass of foliage forces the eye to the white trunks, whose straight lines in themselves do not attract. In other words, the background rejects rather than supports the subject. A longer exposure and more distant viewpoint, I believe, would have produced a warmer picture.

GEORGE BEANE, Jr.

WE have here two attractions, the roadway which draws the observer towards it as strongly as the prominent birches. Place a finger over the roadway, and the birches immediately assume the place the maker of the print intended. Subduing by work on negative or toning down would give requisite result. Unfortunately, the picture is undertimed and, therefore, shadows which make up greater part of print are weak and messy; and, most of all, there is no distance which could be nicely incorporated in this picture at end of road.

LOUIS R. MURRAY.

THE PICTURE CRITICISED THIS MONTH

In many ways, "The Birches" is a very creditable piece of work. The tree-trunks have a roundness which is rather attractive, and the sense of depth is good. However, the leaves which form the top half of the picture are too flat. As it is reproduced in my copy of Photo-Era Magazine, the mass of these leaves shows a distinct lack of detail and that feeling of depth which is so well brought out in the lower half of the picture. They were apparently underexposed in the original negative.

It was unfortunate that the fence made it necessary to trim off so much of the right side. It has resulted in a cramped effect which helps to spoil an otherwise good picture. Would it not have been possible to move the camera to the left a little, and still get the desired effect? I believe that it would. This action would have slightly spread the whole composition, partly making up for the effect produced by trimming so close to the tree-trunks.

Leonard C. Rennie.

My first impression of "The Birches" was that it made an interesting picture. Then the various faults began to appear. First, the underexposure bothered me. One second, at stop F/16, with a three-time filter, on a hazy day and in the woods, seems to be too short, as the leafy background is nothing but a blur. Next, the short piece of road coming in from the left and curving out again annoyed me also. Another thing was the birch-tree on the right—going out of the picture. I should like to see a properly exposed picture, without the road, and with about three-quarters of an inch more view on the right. The obtrusive fence, that Mr. Neville says is trimmed out, might bother a little. Aside from these faults, I think that there is an opportunity to make a handsome picture of "The Birches".

A. L. Overton.

Certain skeptical individuals, unable to interpret pictorial art—but otherwise highly endowed, mentally—have asserted that artistic excellence is not a measure of intelligence. Believing all intellectual advance to be measured in terms of professional attainment, business-success or financial reward (and citing isolated instances—the exception, not the rule) they claim that expression in art is only emotional gratification, primitive in its origin, a product of willing and not of thought. They forget—or probably never knew—that success in pictorial art demands the comprehension and application of natural laws and that increasing knowledge—intellectual advancement—is necessary for its growth into spiritual expression.

Our legal friend, Mr. Neville, will appreciate a criticism which indicates the violation of well-established laws and a lack of intelligent application of the forces

(*Continued on Page 224*)

OUR ILLUSTRATIONS

WILFRED A. FRENCH

THE frontispiece, this month, presents another of Hamilton Revelle's delightful outdoor impressions. The main pictorial interest is situated at the top of the picture-space and at once suggests the presence of two distinct and delightfully composed pictures. This circumstance accords with a worthy personal trait of the artist—a generous, sympathetic spirit. However, the horizontal group of objects, including the slender elms in the center, forms a still larger group with the lofty arch beyond. The dominating quality of the picture, the atmospheric effect of a wet, rainy day, has been interpreted in a masterly manner.

Data: Washington Square, New York City; February; late afternoon; dull light; Richard Verascope (4.5 x 10.7); Zeiss Tessar; at stop F/8; ½ second; Imperial Special Rapid; pyro-soda; print, personal method.

In illustrating his article on photographing homes, pages 177 to 183, W. X. Kincheloe does not mean to imply that his pictures are models of artistic and technical excellence. They are open to criticism. Besides, there are architectural photographers of national reputation whose methods of selection and lighting differ from those of Mr. Kincheloe. Perhaps the best of the latter's illustrations in this issue is "The Aristocratic Mansion," page 181. The setting is admirable, the foreground is well managed, the sky is good and the lighting of the white structure is soft and pleasing. The center of the façade (the portico) is at the left of the middle of the picture-area, and is slightly in perspective, all of which indicates the artistic skill of the photographer. The enjoyment of the picture would be complete if the right corner of the building were less brilliant than it is at present. This, apparently, could be managed by making the exposure later in the day, when the solar rays will fall obliquely on the front side of the mansion, provided, of course, there are no obstructions—trees, a tall building or chimney.

Data: **"The New House"**; July 12, '22; 5 P.M.; light, very dull, heavy rain-clouds; 4 x 5 Korona view-camera; 6-inch Goerz Dagor in Compound Shutter; stop, F/12; 1/25 second; Cramer Hi-Speed; Rodinal; overdeveloped so that sky printed white; clouds printed in from separate negative on Cramer Medium Iso; print, Azo E No. 3. **"Home of an Elderly Workingman"**; July 12, '22; 4 P.M.; very faint sunlight; 4 x 5 view-camera; 6-inch Dagor in Compound Shutter; stop, F/9; 3-time color-screen; ½ second; Cramer Medium Iso; Rodinal; print. Azo E No. 2; M. Q. **"The Aristocratic Mansion"**; Oct. 25, '22; 10 A.M.; bright sun; 4 x 5 Korona view-camera; 6-inch Dagor; stop, F/11; Ideal A ray-filter; ½ second; Cramer Medium Iso; Rodinal; 8 x 10 print P. M. C. No. 4. **"The Well-kept Walk"**; November 3, '22; 11 A.M.; light hazy sun; 4 x 5 view-camera; 6-inch Dagor; stop, F/16; ½ second; Cramer Medium Iso; pyro, in tank; 8 x 10 print P. M. C. No. 4; M. Q. **"The Home—Its Owner's Pride"**; May 21, '22; 9.30 A.M.; bright light; 4 x 5 view-camera; Rodenstock's F/5.4 Urinar; 7-inch focus; stop, F/1.8; 3-time ray-filter; ½ second; Cramer Medium Iso; Amidol; print, Azo E No. 2; M. Q.

As I predicted a number of years ago, aërial photography has become an indispensable branch of the art and profitable to expert and enterprising practitioners. The two terrestrial pictures made from the air, pages 185 and 187, afford proof of the success in this branch of photography. The data for both views are as follows: 4 x 5 aërial camera; 8½-inch Bausch & Lomb lens, F/4.5; focal-plane shutter; Panchromatic plate; enlarged on glossy bromide paper.

On my return from Canada, via Burlington, Vermont, last December, I tried to get a glimpse of Mt. Mansfield, the highest of the Green Mountains, but was doomed to disappointment. Only the hills that lay nearest the railroad on its eastern side were visible. The highest of the three peaks of Mt. Mansfield is 4364 feet above sea-level, and commands an extensive and beautiful prospect. As pictured advantageously by the Photo-Craft Studio, from the town of Underhill, the mountain presents a pleasing view to look upon. It forms the subject of a picture-postcard that enjoys an extensive sale.

"The Two Waves", page 191, is an unusually successful photograph of surf. The values are remarkably true and the sense of motion has been extremely well rendered. The chief mass of agitated water, a breaking wave, occupies a favorable place in the composition, and all other breaking and onrushing waves are duly subservient.

Data: November; 3 P.M.; bright sun; Ernemann 3A camera; Vinco lens; stop, F/6.3; 1/50 second; Eastman Speed Film; Edinol; enlarged on Ilford Cream Bromide; Edinol.

Technically less successful than "The Two Waves" is the camerist's picture of San Fernando Mission, in California, page 193. Viewed at a distance of about five feet, however, Mr. Webb's picture assumes an air of increased and satisfactory clearness and beauty—the fountain being of more interest than the arcaded building of the Mission. There seems to be no question, however, that the widely distributed highlights—the large void areas at the extreme right, in particular—are a source of irritation to the critical eye. A similar problem of strong contrasts was more successfully met by Livingston Stebbins in his Bermuda picture, "The Chimneys", which appeared in the March issue of this magazine.

Even now, all Mr. Webb needs to do—if he so desires—is to perform a little careful work (local reduction) on his negative, and an harmonious ensemble with sufficient contrast will be the result.

Data: Spring; 2 P.M.; 5 x 7 plate-camera; Goerz Dagor; stop, F/11; 5-time color-screen; 1 second; Hammer Double-Coated Ortho; Edinol; enlarged on Ilford Cream Bromide; Edinol.

Although an interesting subject, "Low Tide", page 194, by no means represents the rare technical skill of Peter Botel, who is a master-craftsman. His "Spring", "Water-lilies", and other contributions to these pages, during the past few years, are remembered pleasantly by those who have seen them. The values in the present picture are remarkably true and the combination of oddly shaped rocks and the waters of the ebbing tide appeal to the lover of marine-subjects. The print was awarded Honorable Mention in our "Marines" competition, August, 1921.

Data: Near Santa Monica, California; April 15, 1921; 9 A.M.; faint sunlight through fog; 11-inch Protar; stop, F/12.5; 1/25 second; Hammer Ortho; Rytol (tank); enlarged on Artura Carbon Black.

"The Midnight Luncheon", by Chas. W. Long, page 199, has the following data—Anthony's Platyscope lens; at stop F/16; flash, one teaspoonful of Victor Powder; Seed Gilt Edge plate; pyro; print, Aristo Gold paper. See also page 198, first column.

A little longer exposure, and "The Little Horseman", by Eleanor L. Smith, page 203, also on front-cover, might have captured a prize in the "Domestic Pets" competition, last November. The jury was a bit doubtful about the curious cloud-effect in the sky, but admired the thematic novelty and composition of the picture.

Data: Made in San Diego County, California; Sept.; 11.30 A.M.; stormy clouds in sky; 6½ x 8½ plate-camera; 7-inch—— lens; stop F/16; 2-time color-screen; inst. cap-exposure; Standard Ortho; Rodinal; print, W. & C. Palladiotype.

The innocent, newborn, little creatures—pictured so many times as emblematical of a new life, and so charmingly in the present instance by J. B. B. Wellington, page 204—probably will never cease to lure the camerist. Besides being an experienced photographer, Mr. Wellington is an eminently successful producer of photo-materials capable of yielding technically superb results. A minor incident, perhaps: but you will notice that Mr. Wellington has left desirable space at the right of the end chick. He might easily have trimmed most of it off and thus impaired the appearance of the picture.

Data: Wellington Super Extreme plate; print made on Wellington Carbon Bromide.

"Alpine Snows", page 205, is a direct, unmanipulated photograph, without detail or gradation, giving the effect of a pencil-sketch, in Mr. Cadby's style.

Few sea-coasts offer the artist more varied and picturesque material than that of the state of Maine. Mount Desert with its numerous islands and bays is particularly rich in rare and attractive scenery, examples of which have been pictured in the pages of PHOTO-ERA, frequently, during the past twenty years. Charles A. Townsend, a commercial photographer of the Pine Tree State, finds it profitable to make most of his pictures from the viewpoint of a pictorialist, and, judging from the specimens of his work that have appeared so far in this magazine, I do not hesitate to pronounce him eligible to enter prints in some of our prominent exhibitions.

His "Otter Cliffs", page 206, evinces a firm, artistic grasp of a difficult subject. This locality is very familiar to me, for I have an album filled with 5 x 8 contact-prints of negatives I made about thirty-five years ago, and Otter Cliffs is one of them. Mine was made at low tide, whereas Mr. Townsend's brilliantly illuminated and superbly commanding picture was produced at high tide.

September; 8.30 A.M.; full sun; 5 x 7 plate-camera; 7½-inch Voigtländer Collinear; stop, F/16; ½ second; 5 x 7 Cramer Inst. Iso; pyro-acetone; 11 x 14 print on Artura Carbon Black enlarged from reproduced negative; clouds put in positive which was made on Eastman Commercial Ortho Film; from this, negative was made on Eastman Portrait Film and enlarged with Verito lens on Artura Carbon Black.

Advanced Workers' Competition

WHEN lost in admiration before Botticelli's wonderfully beautiful "Madonna and Child", in Montreal's Gallery of Fine Arts, last December, I did not dream that on my return to my desk, in Boston, I should find an entry in the "Home-Portraits" competition reminiscent of the style of that XVth century painting. Yet, such was the case; and because of its originality and the Botticelli-like quality of the child at the left in the group, "Sisters," by J. Herbert Saunders, page 209, the picture was awarded the first prize. One of the best technical features of the group is the tone-values, the flesh-tints being rendered with due regard for accuracy.

Data: Made in room with two windows; August; about 10 A.M.; good diffused light; quarter-plate (3¼ x 4¼ inches) Klito camera; 5-inch Aldis lens; stop, F/8; 1 second; Barnet Super Speed Ortho; Monomet; enlarged on Eastman Royal Bromide with Struss lens.

The at-home atmosphere is delightfully introduced in Dr. Kilmer's "Mother and Child", page 210. The arrangement of the sitters, too, merits praise, although the "younger" of the two was not under the complete control of the artist.

Data: 3¼ x 4¼ Graflex; F/4.5 Zeiss Tessar; at full opening; 1/10 second; Film Pack; enlarged on Artura Carbon Black with Verito lens at F/8.

All will agree that Natalie was good, and so yielded a satisfactory portrait. The modeling and values throughout are excellent. Mr. Smith is not a professional and makes no specialty of children's portraits, yet he succeeds admirably in all he does.

Data: April; noon; no artificial light; 3¼ x 4¼ Reversible Back Auto Graflex; 7¼-inch Ic Tessar; stop, F/5.6; 1/20 second; Wellington Anti-Screen plate; pyro, tank; print, Cyko Plat.

Beginners' Competition

THE scenic effect of R. A. Cecchini's early-morning picture, page 215, was obtained by means of great underexposure, and at the expense of detail and values. The silhouetted result is striking and pleasing in the main.

Data: January; 6.30 A.M., sunrise; 4 x 5 Reflex; 7-inch Euryplan; stop, F/5.6; 3-time color-screen; 25/100 second; Standard Polychrome; Elon-Hydro; print, Azo No. 1 Glossy.

The author of the second-prize picture, page 216, is apparently devoted to soft-focus work and sometimes succeeds in producing admirable results. One of the dangers in this branch of endeavor is the suppression of planes, as evidenced in Mr. Graves' present effort. Many workers prefer to use a standard soft-focus lens in making the original negative, rather than diminish the clear definition in the process of enlarging, although good results by the latter method are frequently produced.

Data: October, 1922; 4 x 5 camera; Protar lens; at stop F/16; sky-filter; ½ second; Eastman film; enlarged on Artura Carbon Black and White Mat.

Example of Interpretation

A FINER example of interpretation with bridges as a subject it would be impossible for us to present, than on page 212. "East River" was deservedly accorded the first prize, and published in August, 1922, together with my comments. Data: May, 1922; bright sunlight; Newman & Gardia Reflex Camera (6½ x 9 cm.); 5¼-inch Ross Xpres; stop, F/6.3; 1/50 second; Imperial Panchromatic; pyro; bromoil print.

Our Contributing Critics

THE above-named scribes will face a task that is not so easy as Mr. Kissinger's "The Road" or Mr.

Neville's "The Birches". However, "Contentment", by De Witt H. Thompson, page 220, will receive adequate attention, although there are—but here are the data: July; 2 P.M.; sun through clouds; Ansco Vest Pocket No. 1; Smith Semi-Achromatic lens; used at full opening; 1/25 second; Kodak Autographic Film.

Dr. W. C. Roentgen—X-Ray Discoverer

DR. WILLIAM CONRAD ROENTGEN, discoverer of the Roentgen or X-ray, used in science and medicine, died February 10, in Munich, in his seventy-eighth year.

Prof. Roentgen, born in Lennep, Rhenish Prussia, on March 27, 1845, received his early education in Holland and subsequently in Switzerland, taking his first degree as Doctor of Medicine in Zurich, 1869. Holding the chair of physics in several German universities, he removed to Würzburg, where in 1895 he made his epochal discovery that has revolutionised science and medicine. This occurred during experiments with almost perfect vacuum as a conductor, with the aid of gases and electricity.

In recognition of the virtues of the X-ray, whose powers instantly were realised throughout the world, Prof. Roentgen received the Rumford medal of the Royal Academy, 1896, jointly with Philip Lenard. He also was awarded the Nobel prize, 1901, for his researches in physics.

Experimenting with a highly exhausted tube, Prof. Roentgen observed that a paper covered with barium platino-cyanide, lying nearby, became fluorescent, evidently because of an invisible radiation from the tube, which was enclosed in black cardboard at the time. He found that this radiation passed through other materials, opaque and of great solidity, and that it would affect a photographically sensitised plate. Because he did not then know the true nature of the invisible rays he called them by the letter which denotes to the scientist the unknown quantity.

Eminent Family-Talent

W. H. C. PILLSBURY, the well-known pictorial worker and member of the Union Camera Club of Boston, is receiving congratulations for the eminent progress attained by his young son, Kenneth Clark Pillsbury, a professional portraitist. Mr. Pillsbury is a graduate of the Art Museum School, of Boston, and, instead of oil or watercolors, has chosen red chalk as the medium in which to execute his portraits. He recently held an exhibition of his work at the Grace Horne Gallery, 146 Stuart Street, Boston, which won the unanimous approval of the local art-critics. The *Boston Herald*, the *Boston Transcript* and the *Christian Science Monitor* were particularly warm in their praise of the marked progress the young artist has shown during the past year, and predicted for him a brilliant future if he will continue to advance as he has of late.

Certainly, the Pillsbury family is not short of artistic talent, and it will be interesting to see which of the two artists, father or son, each in his own special medium of expression, will attain the greater reputation.

Camera Catches Thief in the Act

IDENTIFIED by a flashlight picture he had unwittingly made of himself as he was robbing the Griffin Studio, Willie Roy, a negro, was arrested to answer a charge of larceny.

The Studio has been robbed on a number of occasions during the last few weeks and the cash-register rifled of considerable money.

Mr. Griffin conceived the idea of obtaining a photograph of the thief in the act of rifling the till. He placed a camera in a niche in the wall in front of the register and connected it with the cash-register by an electric wire. When the thief pushed down the letter A to open the drawer, the electric attachment made the flashlight picture, and, at the same time, permitted a photograph above the opening in the wall where the camera was placed to fall down over the opening and conceal the camera. The picture was obtained Sunday morning and the studio-proprietor and the police department have a splendid likeness of Roy seated behind the cash register.—Exchange.

Fashions and the Kinema

FASHION pirates in France have adopted an up-to-date method of stealing new dress-designs. They use the small pocket kinema cameras that have become so popular in the French photographic world.

These miniature instruments are easily hidden in a lady's muff, amongst her furs or in the big bell-sleeve of a cloak; and so Mme. Pirate is told by her employer to attend fashion-parades and similar exhibitions, where she secures pictures of cloaks, frocks and hats from three or four points of view.

Since the cameras used are entirely automatic in their working—pressure on a button "does the trick"—they can be operated with complete immunity from detection; and Parisian designers are said to be at their wits' end to know how to combat this latest method of fashion-stealing.—*London Chronicle.*

Photography to Prove Durability of Copper

As a part of a nation-wide campaign designed to foster the use of more permanent materials in building, the Copper and Brass Research Association, 25 Broadway, New York City, has announced a contest for schoolchildren, and others, offering cash-prizes for the best photographs that show the relative durability of materials which go into the construction of American homes. Fourteen prizes ranging from $150 to $10 will be awarded for photographs of copper- and brass-objects of utility or ornamentation which to qualify must have been in use more than thirty-five years. Included are copper-roofs, brass door-knockers, old copper cooking-utensils, brass plumbing-pipe. Fourteen additional prizes of similar amounts are offered for the best photographs that show the results of using substitutes for copper and brass.

Our Contributing Critics

(*Continued from Page 221*)

at his command—assuming that the picture presented is a criterion of his ability. The obvious defects, mentioned in detail by others, suggest the need of perusal of text-books on pictorial composition and of good photographic magazines, PHOTO-ERA MAGAZINE in particular. Our friend saw beauty in "The Birches" and tried to perpetuate his vision, but failed. Mr. Neville will hardly plead ignorance of law. He must take his medicine.

J. W. ADAIR, M.D.

ON THE GROUNDGLASS

WILFRED A. FRENCH

"That Pleasant Expression"

A., ONÉ of New York's foremost photo-pictorialists, who is blessed with a rare sense of humor, told me an interesting story at his expense, the other day.

He was waiting in a subway station for the arrival of a train which was delayed on account of an accident. Standing near one of those mirrors conveniently placed over a certain type of vending-machine, he utilised the opportunity to see if his cravat were still on straight. In doing so, he noticed that the light on his face was exceptionally good. He admired the modeling, the tonal gradations and also the satisfying appearance of the original reflected in the mirror. He was also thinking of that "pleasant expression" so often lacking in a portrait-photograph, and so hard to obtain by the eager, conscientious studio-artist.

He practised before the mirror and finally found an expression—a quiet, happy smile—quite becoming to his style of beauty and which he wished he could duplicate before the camera, particularly as his friend, Floyd Vail, of the Camera Club, had offered to make a portrait of him, which in itself was a distinguished honor. "If only Vail were here at this moment," he said to himself. Just then he became aware that he was the object of profound and sympathetic interest. Without moving his head, he observed that several persons, including a couple of mischievous-looking young girls, were watching him with considerable merriment. "He's stuck on himself," he heard one of the girls remark. Then much giggling. "He's having the time of his life," added her companion. Still more giggling. He felt and saw the red color diffuse his countenance. With much presence of mind, and without appearing perturbed, he deliberately arranged his cravat, withdrew and reinserted his scarf-pin so as to show the shank, which he had neglected to do that morning, pulled down his waistcoat and then walked over to the news-stand, ignoring intentionally the incoming train, which, after stopping briefly, carried away the audience he had been entertaining quite unconsciously and free of charge for a period of ten minutes.

It's now up to A. to make an appointment with his friend, Floyd Vail, and record that happy smile which preceded a period of self-inflicted embarrassment in the New York subway.

When a Portrait is a Crime

THE Editor receives frequently a print, or a collection of prints, accompanied by a request for a candid and helpful criticism. He complies gladly, particularly when the sender has enclosed return-postage. When it comes to a portrait of a society-lady which, having been made very hastily by a local photographer and also, perhaps, poorly reproduced by a local newspaper, he hesitates to give an opinion. He dislikes to be personal. If the lady, herself, sends it for private criticism, that is quite another matter; and even in such circumstances, it would be impolitic to express an adverse opinion. But here is the reproduced portrait-photograph of a popular, charming and beautiful *débutante*, inexcusably badly done from beginning to end. It has been sent to the Editor by an indignant friend of the lady. It is a front-view; the lips are widely parted showing both rows of teeth, due to a very faint smile; the black hair is covered with masses of white light making it look shaggy and wild; the entire face is devoid of gradation and modeling; the background is busy with large, irregular, white spots—in fact, the somewhat inelegant expression "crazy looking" would be an appropriate designation of a perfectly wretched portrait of an exceedingly attractive subject. It has the earmarks of a carelessly made at-home portrait emanating from a well-known portrait-factory. No wonder!

He Failed to Make It Pay

WASN'T there a small photo-publication that flourished for a while and during the late war passed out of existence? It must be like the one of which Whiting tells the following story in the *Boston Herald*.

"This happened to the publisher of a newspaper in a small city during the difficult war-period, when many such newspapers were crowded to the wall. He had borrowed $5,000 from the local bank on his note, secured by the newspaper-plant. The banker had to tighten up, and he wrote his friend of the newspaper telling him to pay off the note. He got no reply. So he asked the newspaper-man to come and see him. The conversation went like this:

"Bill, I'm sorry, but we've got to tighten up, and you'll have to pay us that note."

"Jim, do you mean that you will not renew that note?"

"That's just what I mean, Bill."

"Say, Jim, did you ever own a newspaper?"

"No, Bill, I never owned a newspaper."

"Well, Jim, you do now!"

A Photo-Musical Composition

A CORRESPONDENT, who is a musician as well as a camerist, suggests that one of the big camera clubs include in its next musical program Alfred Cortot's pianoforte arrangement of Vivaldi's "Concerto di Camera", because of its manifest interest to photographers.

My reply would be that our esteemed correspondent get an introduction to Miss Lingua Italiana and then reconsider his suggestion in regard to Vivaldi's concerto. I have heard it performed, and the only connection the piece might have with photography is the rapidly flying hands of the pianist, which would require a high-speed camera to make a legible photographic record.

A Libel on Chicago

WELL-DRESSED girl (on street-car)—"Why, her and me were the best of friends before him and her met. Of course, this is between you and I."—Boston Paper.

EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication

Attend and Support the Photographic Arts and Crafts Exposition

To the entire photographic industry in the United States, the success of the coming Photographic Arts and Crafts Exposition, to be held at the Grand Central Palace April 21 to 28, 1923, is important. Advantageous always, it is a manifestation of ability to work together for the common good. The desired development of any business is dependent on co-ordination of effort. Hearty co-operation will achieve what can be accomplished in no other way.

Too many men in the photographic industry are unacquainted with those whom they should know. Not sufficiently do they take advantage of opportunities to make friends in the trade. Timidity and distrust may environ the unknown. Lack of interest has caused numerous difficulties. By keeping aloof, people lose interest. By maintaining friendly contact, manufacturers and dealers can be helped. Mutual benefits may be derived from a meeting of competitors. Everything that serves to bring harmony, whatever operates to promote amity and good fellowship, is beneficial. Interchange of ideas, narrations of experience and comparisons of achievements are always productive of good.

Neither expositions nor trade-conventions receive the recognition to which they are entitled. What is accomplished at trade-expositions does not always appear immediately, in full, on the surface. The materialisation of things suggested may be delayed. The potential benefits of the personal contact between buyer, seller and the consuming public are often not appreciated until a later day. However, the fact remains, where attention is attracted, curiosity aroused, interest stimulated and enthusiasm created, changes for the *better* must result. Though reaction varies under different circumstances, the consequential developments and benefits following an exposition invariably will be in proportion to the attendance as well as to the originality, attractiveness and general scope of the exhibits.

The coming Photographic Arts and Crafts Exposition is today an assured success. Much thought and time, as well as money, has been expended to make this exposition a credit to the industry, and one that will do good, not only for the moment, but for many succeeding months thereafter. It has been intelligently promoted by the management, and the co-operation of the exhibitors, to date, has been all that could be hoped for. The exposition is associated with plans that extend beyond the doings of 1923; and, if given continued support by the leaders of this great industry, will certainly become an established institution. Responsibility for the success of the Photographic Exposition is not restricted to the promoters and exhibitors. So far as pertains to the prestige, the whole industry is involved. Excellent opportunities will be presented. Those who fail to avail themselves of chances offered generally are not exempt from blame.

For your own interest, you, and every one of you, who are in a position to prosper through the growth and development of the Photographic Arts and Crafts Industry, should attend, exhibit and support the exposition, as a duty to the industry of which you are a part. To attend and to induce friends to go to see what is exhibited should be a duty as well as a pleasure, so that the exposition's slogan "Let's Make It Unanimous" will become a reality. During Photographic Exposition Week, it should be a rallying place for all who would be benefited by boosts given to the photographic industry. New York City is always a point of interest for everybody, so with the exposition as an added attraction, it should draw trade visitors from every part of the country.

If the coming Photographic Exposition is the big success it promises to be, the desirability of holding trade-conventions in conjunction with the expositions will be more apparent. Granted a large attendance this year, the Exposition is sure to be bigger and better next year. Then a proposition to hold a convention at exposition-time may be regarded favorably. Additional members are certainly needed by every organisation in the photographic industry. To obtain numerical strength, to gain the support and co-operation of thousands who are not enrolled members of any photographic association, proper steps should be taken. The average man has an inclination to follow the crowd. *Humanity en masse is influential.* If the attractions offered by the Photographic Exposition are utilised to obtain recruits for photographic trade-organisations, so much the better. An influx of new members would enable all associations to increase their usefulness.

Associated with desirable publicity, useful in moulding public opinion, the photographic exposition will concentrate the minds of the public on this industry at just the psychological time, in the spring, when one's thoughts turn to the open country, where a vacation without a camera is not complete. This exposition will also certainly act as a stimulant to *every* other branch of the photographic and allied industries. What a successful Photographic Exposition means to the entire photographic industry, time will reveal. Results will tell, the country will be shown. Except by those who fail to seize favorable opportunities, the exposition will not be ignored. The event is too important to be overlooked. Incidentally, the Encyclopedia Britannica has this to say about expositions:

"National and international exhibitions may be ranked among the most remarkable features in the industrial record of the world, and have taken their place as permanent instruments of civilisation, for by their means the diffusion of knowledge has been advanced and extended in the most wonderful manner."

Attention, Camerists of Winnipeg!

From recent correspondence we learn that a number of camerists in Winnipeg are eager to have a good camera club. In fact, steps have been taken to get in touch with those who might be interested to join and to support a first-class photographic organisation. We are glad to give publicity to the matter and to urge all those who might be interested to write without delay to Mr. Arthur Joy, manager of Strains, Ltd., Winnipeg, Manitoba, Canada, who will be pleased to answer all inquiries until an organisation is formed.

Second Annual San Francisco-Oakland International Salon of Photography

THE Photographic Section of the Oakland Art Association held its First Salon in the Fall of 1921, and the Pictorial Photographic Society of San Francisco its First International Salon in the Spring of 1922. Due to the hearty support and co-operation of a large number of pictorialists, both in this and other countries, these exhibitions were eminently successful. Realising the proximity of Oakland and San Francisco, on opposite sides of San Francisco Bay, and the large number of salons that make requests for support, the members of the societies feel that the best interests of pictorial workers and the public will be served by the holding of one exhibition in the bay-district, which will be shown in both cities. To this end a Joint Committee has been appointed to conduct the Second Annual San Francisco-Oakland International Salon of Photography.

The salon will be held in San Francisco from August 31 to October 7 inclusive, and in Oakland from October 14 to November 11 inclusive, 1923. August 10 will be the last day for receiving entries. It is the desire of the committee to set a high standard for acceptance of prints, and at the same time to make the salon broadly representative. It will follow that there will be no preference or prejudice as to process or school of expression. In San Francisco the salon will be held in the Galleries of the San Francisco Museum of Art (Palace of Fine Arts of the 1915 Exposition), in Oakland at the Art Galleries of the Oakland Art Association in the Auditorium. Both locations are the centers of art-interest in the respective cities and provide ideal conditions and facilities for a dignified presentation. Both previous salons were particularly well attended, even without the consideration of the fact that both were new, the attendance in San Francisco being nearly 18,000. This announcement is made so that the new date may be included in the plans of exhibitors for 1923. Entry-forms with full particulars will be available at a later date. Conditions of entry will be substantially the same as for the previous salons. Prints will be shown under glass against a neutral tint background in frames. Due to this method of presentation last year, it was found that those prints on mounts that extended not more than an inch beyond the print facilitated arrangement in hanging, and made a far better appearance than those having a larger area of mount. Accordingly, submission of prints so mounted—upon a light-toned mount extending not more than one inch beyond print-edge—is suggested. Prints so submitted will be judged against an appropriate background. Any suggestions or communications should be addressed to the corresponding-secretary, Mr. H. A. Hussey, 64 Pine St., San Francisco, California.

Pathological Pictures at Photographic Exposition

THE pathological curator and photographer of a prominent hospital, the Philadelphia General Hospital, plans to show to the public examples of medical and scientific photography at the International Photographic Arts and Crafts Exposition, it is announced today by Harry A. Cochrane. He states that Howard N. Gosner, the pathological curator and photographer of this hospital, plans to display color-photomicrography, in lantern-slides and prints, and stereophotographs of anatomical and pathological subjects.

According to Mr. Cochrane, this exhibit will show to the public the great importance that this field of pathology has played in modern medicine and science. Prominent camera clubs have planned to exhibit material at the exposition. The Southern California Camera Club of Los Angeles, the Elysian Camera Club of Hoboken, are among those who are expected to exhibit at the exposition.

P. A. of A. Convention in Washington, D.C.

GENERAL approval of photographers in the United States and Canada has followed the action of the executive board and officers of the Manufacturers' Bureau of the Photographers' Association of America in selecting Washington, D.C., as the convention-city for 1923 with convention-dates from July 16 to 21 inclusive and headquarters to be at the Washington Hotel. At the board meeting in Washington on February 5, many manufacturers and dealers were represented; and most of the Amalgamated Associations in the eastern territory had delegates in attendance.

The Convention-Hall in Washington, D.C., was approved as the meeting-place for the 41st Annual Convention of the association to be held on the dates mentioned. A tentative program was agreed upon; entertainment-features were discussed; and, although the details have not been worked out yet, a splendid educational program of great value will be featured, with sight-seeing tours to interesting points in and around Washington. Representatives from the Chamber of Commerce, Kiwannis, Rotorarians, automobile clubs and civic bodies in general have volunteered their support to make this convention one of the best that Washington, D.C., has arranged for in many years.

The local photographers are eager to make this gathering a success and have promised their assistance and co-operation to the fullest extent. Everything points to a large and enthusiastic international meeting. It is now up to the photographers of the United States and Canada to make every effort to plan their vacations with the convention in mind; and the board feels that, with the same support as given in the past, the 1923 convention will eclipse all former gatherings held by the P. A. of A.

A. J. COOK, *Secretary.*

Floyd Vail, F.R.P.S., to be Director Pictorial Section of New York Exposition

THE International Photographic Arts and Crafts Exposition to be held at the Grand Central Palace, New York City, April 21 to 28, inclusive, 1923, will have for the managing-director of the Pictorial Section, Mr. Floyd Vail, F.R.P.S., the well-known pictorialist, exhibitor and chairman of the Print-Committee of the Camera Club of New York. He is enlisting the support of other prominent amateur and professional photographers, to aid him in the work of judging and managing the Pictorial Section of the Exposition. Among these are Nickolas Muray, the eminent Greenwich Village portraitist and illustrator; Dr. T. W. Kilmer, a member of the Camera Club of New York and a successful exponent of pictorial photography in this country and abroad; Mr. Wm. A. Alcock, also well-known pictorialist and contributing member of the Pittsburgh and Los Angeles Salons; and Mr. John E. Garabrant, vice-president of the Professional Photographers' Society of New York and chairman of the Commercial Section of the Photographers' Association of America, has offered to assist in every way possible and his advice, suggestions and co-operation

will be of inestimable value. Mr. Frank V. Chambers, editor of three photographic magazines, and active in photographic affairs for many years, will serve with these gentlemen and give them the benefit of his experience.

Other men of prominence who are connected with the professional and amateur interests of the photographic industry—names will be announced later—are to be invited to co-operate.

Carl Paul Goerz

CARL PAUL GOERZ, founder and, until the time of his death, head of the Optische Anstalt C. P. Goerz A. G., of Berlin, died on January 14, 1923. Thus the German optical industry lost one of its most imposing personalities. Mr. Goerz began his business in 1886, in a single room. From this small beginning, the Goerz factories have grown to enormous size, and now cover several acres in Berlin-Friedenau and Berlin-Zehlendorf, with branch factories in Cassel, Leipzig, and several other places. At the present time, there are over three thousand employees in these factories which make virtually everything required in the photographic and scientific field.

The principal products are: photographic cameras and lenses and the optical glass from which such lenses are made; motion-picture film and other roll and pack-films; dryplates; prism binoculars and telescopes; scientific instruments; motion-picture cameras, projectors and mirror-lamps; automobile-lamps from the small motor-cycle lamp to the largest searchlights for ships, harbors and lighthouses.

Mr. C. P. Goerz, who was sixty-nine years old, remained to the last the active head of these huge enterprises. He was highly respected by all who became associated with him or came into business-contact with him. He leaves a widow and three children. Two sons are now actively engaged in the management of the business.

Are You Qualified for This Position?

CONGRESS has provided for an increase of forty-five in the examining-corps of the Patent Office at Washington, D.C. A number of positions will be available July 1, 1923, and a few are open at the present time. The appointments are made through a civil service examination, the title of which is, "Assistant Examiner, Patent Office." A college graduate who has mastered physics, chemistry and mathematics should have no difficulty to pass the requirements. The entrance-salary is $1,740 per year and promotion is fairly rapid. There are appointments for photographic and optical work. Announcements that give the date of the next examination and application-forms may be obtained from the Civil Service Commission, Washington, D.C.

Commendable Publicity

A LETTER from Mr. Harry T. Hall, vice-president of the Bank of the Manhattan Company of New York, contains much truth and likewise presents an excellent suggestion which might well be followed by other large business enterprises. Mr. Hall writes, "Keen observers of our national life have commented time and time again on the intense pride of the average American in his own State and his own city. Some have gone so far as to say that we carry it to the point of sectionalism that hinders the development of the country as a whole. Certainly, many of us are so interested in the place where we live and work that we are in danger of forgetting that there is anything at all beyond its limits. It has been said—and perhaps with good reason—that this is more true of New Yorkers than of men in any other city. At any rate, the Bank of the Manhattan Company believes that the more New York knows and appreciates what is going on in other parts of the country the better it will be for all of us." Enclosed with Mr. Hall's letter was a proof of an advertisement which is one of a descriptive series to be run in New York City newspapers and which will tell about the wealth, resources and manufactures of every State in the Union.

Right in line with this idea is the series of illustrated articles, prepared by various camera clubs, which have appeared and will appear in PHOTO-ERA MAGAZINE. To date, the Boston Y. M. C. U. Camera Club and the Toronto Camera Club have contributed articles on their respective cities. In the near future the Portland (Me.) Camera Club and California Camera Club of San Francisco will present a literary and pictorial view of their home-cities. The more we know about each other, and about the place where others live and work, the better able we shall be to make our town, city, state and nation serve mankind.

Will Rounds—Autochrome Expert

MANY of our readers know of Mr. Will Rounds and his work. However, as we are constantly adding subscribers to our subscription-list, we believe that a reference to Mr. Rounds is timely; for the summer-season with its beauty and color will soon be here. Briefly, there are few photographers who have made a more exhaustive study of the famous Lumière Autochrome plate and its manipulation under all possible conditions. Mr. Rounds has proved beyond a doubt his mastery of the Autochrome. In fact, he has been asked so often to explain his methods to other camera-workers that he has arranged a course of instruction which is practical, comprehensive and moderate in price. We urge those of our readers who are eager to make good Autochromes to write to Mr. Will Rounds, 112A First Street, Lowell, Mass., for his latest descriptive folder.

Do Not Neglect to Read Catalogs

DEAR MR. BEARDSLEY:

If a few words of appreciation will not be amiss, I should like to make a few comments on your article entitled, "Reading Up on Photography" in the February issue of PHOTO-ERA MAGAZINE. For the past six or seven years I have been "reading up on photography" in much the same way as the beginner of whom you wrote. I have found it most profitable. I fully agree with you in regard to the value of the catalogs and pamphlets printed by various manufacturers. I should like to add that the Service Department maintained by the Eastman Kodak Company is of great help, if used. But I have found that a great many amateurs are in ignorance of the existence of such a department. If the beginner will make use of the aids which are within the reach of all and which require no expenditure of money, he can achieve much even though possessing an instrument of limited capabilities.

Sincerely yours,

Chicago, Ill. ELSIE C. BULLARD.

Meet Us At The Photographic Exposition

We extend a cordial invitation to all our subscribers, readers, dealers and advertisers to call at our booth, number 55, during the coming Photographic Arts and Crafts Exposition, Grand Central Palace, New York City, April 21 to 28, inclusive. It will be a pleasure to meet our correspondents and friends, and to render them any service within our power. We appreciate and value the support and patronage that we have received. Please give us an opportunity to thank you personally.

A. H. Beardsley, Publisher.

Tenth Pittsburgh Salon of Pictorial Photography

Unusual interest has been shown in the Tenth Annual Pittsburgh Salon of Pictorial Photography which opened its doors to the public on March 3. Three hundred and twenty prints were accepted by the jury of selection which consisted of Dr. A. D. Chaffee, New York City; Francis O. Libby, Portland, Maine; and Holmes I. Mettee, Baltimore, Maryland. The collection this year contained a larger number of foreign pictures that heretofore. England, Scotland, France, Australia and Italy were well represented. California entered eighty-two prints from twenty-seven contributors; and New York State fifty-nine prints from twenty-four contributors. The other states were scattered. The general representation from the United States and Canada showed that there has been a greater interest in pictorial photography than in the past.

The May issue of Photo-Era Magazine, unless unforeseen conditions arise, will contain an illustrated review of the Tenth Pittsburgh Salon prepared by a well-known photographic authority.

We Extend Our Sympathy

Our cotemporary, *The Guide to Nature*, edited by Dr. Edward F. Bigelow, suffered a serious loss on February 25. The printing-plant of R. H. Cunningham, Stamford, Conn., was entirely destroyed by fire. The March issue of *The Guide to Nature* was on the press at the time. The entire stock of paper, cover-design plates for twelve months and other printing-material was a total loss. There was no insurance. The only capital is the merits of the cause of nature-study as advocated by the Agassiz Association through this helpful magazine and the faithfulness of friends. We hope that those of our readers who know of the splendid work that is being done by Dr. Bigelow to encourage nature-study and nature-love, will help a good cause by sending a contribution, large or small, to The Agassiz Association, Inc., ArcAdiA, Sound Beach, Connecticut.

March Meeting of P. P. of A.

The Pictorial Photographers of America held their regular March meeting at their permanent home at the Art Center, 56 East 56th Street, New York City. The principal speaker of the evening was Mr. Edward Steichen of Photo-Secession fame. In his talk Mr. Steichen said he did not think that pictorial photography has progressed much since the Photo-Secession days. Although he had been guilty of doing soft-focus work, he had concluded that work being done with soft-focus lenses is not pictorial or artistic. He conceded that a very few workers were turning out pictorial work with them. He said the work he is doing now he could not get sharp enough. He also said that his eyes had been opened to the pictorial possibilities of sharp lens-work while in charge of aeria lphotography in the army. His talk was most interesting; but left his hearers puzzled, most of whom have been striving for pictorial quality in their work, by using entirely different methods than he advised. Whether or not his audience agreed with him in his talk it will be the means of a good many of them asking themselves if they have the right understanding of pictorial photography.

Preceding Mr. Steichen, Mr. Forman B. Hanna, of Arizona, was introduced by Mr. Clarence White, chairman of the evening. Mr. Hanna gave an interesting talk on photographic conditions in his state, and his method of working.

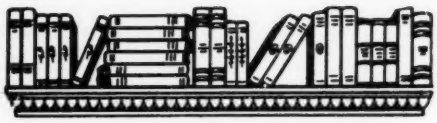
The judges for the coming International Salon have been selected and include Mr. Alfred Steiglitz, Mr. Clarence White, Mrs. Gertrude Kassebier, Dr. Amasa D. Chaffee, and Mr. John Paul Edwards. All indications point to a very large entry-list. The monthly print-exhibit, of which Mrs. Antoinette B. Hervey is chairman, is becoming more and more popular, judging from the number of entries and the quality of work submitted.

The monthly loan-exhibits are creating quite a sensation, as well they might. Dr. Chaffee, the President of the P. P. A., has a collection of his wonderful bromoils on the walls this month. Anyone interested in photography should not lose the opportunity to see these remarkable pictures, if they are conveniently situated to visit the Art Center.

R. E. Hanson's Annual Show

An exhibition representing the present work of Raymond E. Hanson, pictorialist, was held in the gallery of the Society of Arts and Crafts, Boston, U.S.A., from March 1 to 15, 1923. Of the forty-eight prints (enlargements) shown, twenty-six were bromoils. As a prominent local critic aptly expressed it, "Mr. Hanson has the faculty of selecting from Nature's complicated mazes, interesting and decorative bits which exist as complete picture-units without the complications of unnecessary detail." Heretofore, Mr. Hanson has excelled in the beauty of his pictorial motives and the uniform excellence of his technique, without manifesting any marked personal traits. Now, he has selected the bromoil process as a means to express his artistic individuality, using it in a manner that is intelligently conservative and delightful. He is a stickler for values. They distinguish his bromoils. It must be a source of great satisfaction to Mr. Hanson to have at his command and under his immediate control, a method which enables him to produce from a negative any desired number of pleasing prints, no two of which are exactly alike. Of bromides there can be perfect replicas; in bromoil, none. Mr. Hanson is to be commended for resisting the temptation to exaggerate the possibilities of the manipulative bromoil process. Unfortunately, there are pictorialists who seem to delight in crass, uncouth methods when working in bromoil, in the belief that they are manifesting a virile and masterful individuality. They are only deceiving themselves and the sophisticated beholders, besides degrading a beautiful medium of artistic and individual expression.

W. A. F.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

PRACTICAL PRINTING-PROCESSES. Practical Photography No. 10, edited by Frank R. Fraprie, S.M., F.R.P.S. Eighteenth thousand, revised and enlarged. 56 pages text. Price, paper-cover, 50 cents; cloth, $1.00. Boston: American Photographic Publishing Company.

For the amateur or the professional who wishes to obtain a brief statement of principles and the working-formulæ of present-day printing-processes, this revised and enlarged edition of "Practical Printing-Processes" will be found of value. The book is not intended to be exhaustive, but rather to point the way so that the worker, who so desires, may know the right direction in which to proceed. The little volume is well printed, carefully edited and well worth the moderate price charged.

THE SCIENCE AND PRACTICE OF PHOTOGRAPHIC PRINTING, by Lloyd I. Snodgrass, B.S. 297 pages text; 53 halftone and diagram illustrations, Appendix (Laboratory Manual), Tables, Bibliography and Index. Price, cloth, $3.00 postpaid. Effingham, Illinois: Lloyd I. Snodgrass.

Although there are a number of excellent photographic text-books which cover the subject of developing, printing and enlarging, we have not seen one in which the author presents the subject of photographic printing as Mr. Snodgrass has done. He claims no orginality for the material, but he does believe that his method of presenting the subject is different; and, for that reason, he hopes that it will prove of interest and value. Mr. Snodgrass draws freely upon the standard photographic books, magazines and writers for fact and theory, supplemented by his own investigations.

It might be well to point out that the original manuscript was carefully read and criticised by Dr. Alfred B. Hitchins, Ph.D., Director of the Ansco Company's Research Laboratory. Moreover, it should be added that Mr. Snodgrass is a graduate of Cornell University with the Bachelor of Science degree, teacher of science in high schools, instructor of printing and finishing at the Illinois College of Photography, member of Technical Photographic and Microscopic Society and member of Photographers' Association of America. Thus it may be seen that the book has been prepared and criticised by those who understand the practical requirements of amateur and professional photographers.

The volume begins with an introduction which calls attention to the importance of printing, the need of more knowledge concerning it, sources of information and the field of experimentation. Then there follow chapters on Workrooms, Equipment and Supplies, Elementary Chemistry, Preparation of Solutions, Printing-Papers, Choice of Printing-Papers, Preparation and Exposure, Vignetting, Combination Printing, Development, Fixation, Washing and Drying, Toning, Defects in Prints, Finishing, Projection-Printing, Commercial Printing, Printing on Glass, Printing-Out Processes, Printing in Colors, Appendix with Laboratory Manual of Experiments, helpful tables and bibliography. The book is written in non-technical language and in an easy style that holds the interest. We believe that "The Science and Practice of Photographic Printing" will prove to be a helpful guide to the earnest worker who is eager to know of the principles involved. The advanced amateur and the professional photographer will find this book well worth careful study.

Wouldn't Be Turned Down

A TRAVELING salesman walked into a busy shop. He inquired for the purchasing agent and handed him his card. The card was handed back, with a hurried remark by the buyer that he didn't want anything in that line. The salesman made another effort to obtain a hearing. The buyer resented the salesman's persistence, and said, sharply, "I told you I didn't want anything, and I haven't time to waste with you," and so speaking he turned and walked away.

The salesman was not the kind who was frightened by curt manners. Overtaking the buyer, he said, "I haven't much to show, and I can bring it right here." The buyer gave a grudging consent, and shortly after the salesman was showing his line.

He had a new feature which was a welcome innovation to the buyer, and after placing an order the buyer said, "I've been hoping for such a thing for a long time. I wish you had come along sooner."

The salesman still remembered the reluctance with which the buyer had granted him an interview. He said: "You wish I had come sooner, and yet you almost threw me out. I suppose you treat all salesmen the same way, especially if they are strangers to you, as I was. You are glad you did not miss me, but it's no credit to you that you didn't. How many other salesmen have you turned down without giving them a hearing or a showing, and how many other good things have you missed in that way?

"Don't you know that when a man has gone to the expense of coming to your city that his time is worth about as much as yours, and that he must have something fairly good, or he wouldn't come? As long as you are the buyer, isn't it your duty to look at everything, being always on the lookout to learn of new lines and better values? Is it fair to the salesman, or to yourself, not to look, especially when the salesman says, as I did, that he has something new to show you?"

To this plain talk the buyer yielded. He confessed that he had been making a mistake, and said he would give more time to looking at samples thereafter. He will be making a good move if he carries out his resolve.—*Chan-Farco Beacon.*

In a Fog

IF the photographic salesman's job is a trifle trying at times, it still has its little bits of humor. Some time ago one of the fraternity was approached by a client with a query about a film which he had brought back after having it developed. He wanted to know what was the matter, as it was solid black from end to end.

The salesman examined it, and expressed the opinion that the defect was most probably caused by fog, but he was rather startled when the client rapped out, "Fog be ——. The sun was shining for every one I took."—J. R. H., in *The Photographic Dealer.*

LONDON LETTER

CARINE AND WILL CADBY

In a recent letter we mentioned an important photographic competition that was being organised by Kodak, Ltd., and the hotel-keepers of the Grisons Canton in Switzerland. The first prizes, of which there were a good number, consisted of a week's accommodation, and the second prizes of four days, at the hotel wherever the prize winner was staying. The rules were quite elastic, and virtually made it possible for every visitor who used a Kodak to compete. We came to Switzerland specially to judge this interesting novelty in competitions. The closing-day was January 31, 1923.

St. Moritz, Samaden, Celerina, Pontresina, Maloja, Klosters, Davos and Lenzerheide, all of which are well-known winter-sport centers, each offered at least one first prize and one second prize. St. Moritz had three. Competition from each center was confined to that center only, so that visitors knew fairly well who were their opponents.

The response was satisfactory, considering that this winter-season has had fewer sunny days than is usual, and that people took some time—especially when engrossed in the gay and busy life of winter-sports—to realise that there were prizes worth winning. Besides, when the fine weather arrived at last, all visitors were keen to be off on ski-expeditions which, from experience, we know give little opportunity for serious photography. The skaters, perhaps, had the best opportunities, for there are always intervals, even during the most intense skating-practice. The prizes were to be awarded, not so much for technical excellence, but to those prints that demonstrated best the happy characteristics of a Swiss winter-sports holiday. It was stipulated that at least four photographs should be entered by each competitor.

Virtually all sizes of Kodaks were represented, and it was satisfactory that one first prize was won by the tiny vest-pocket folding variety, the owner of which sent seventeen prints, which collectively formed a graphic commentary on every phase of the life out here in winter. Not only did they do this, but they gave a happy rendering of the scenes, and the photographer was either extraordinarily lucky in seizing the right moment to photograph his models, or the latter were very good actors. There were many representations of skiing-parties in every imaginable stage of proficiency, and with some very effective backgrounds; merry picnic-luncheons high in the mountains; skijöring with frisky horses; tailing; toboggan and bobsleigh races. The rinks, too, came in for a lot of attention, and some good and graceful skating-figures were shown. Even the indoor-games were not forgotten, which was evidence of photographic industry during bad weather; and there were a few flashlight-photographs. One contributor sent an interior (a portrait of a contented-looking young man in bed) and conceived the clever idea of calling it "The End of a Perfect Telemark Turn". Cynical as the underlying thought was, it contained a grain of truth, for the continual practising of that troublesome turn leads to far more accidents than occur on trips.

"Taken From Life", the book of types, published late last autumn by Mr. E. O. Hoppé, has been coming in for some adverse criticism in the press. Mr. J. D. Beresford, to use a slang expression of the newspaper-world, "wrote around" these seven types, elucidating and amplifying the stories the pictures tell; and it is with Mr. Beresford's work that the critics find fault, chiefly because of his renunciation of romantic methods. But when we recall the appeal and lasting impression made by the restrained recital of so weird a conception as that unfolded in his "Prisoners of Hartling" (Mr. Beresford's latest book) we feel grateful that he ignores the critics, and continues in his own way. The collaboration of writer and photographer is no new departure, although, so far, it has attracted little attention; but as the photographer obtains more and more control of his medium, it is sure to be extended indefinitely.

Mr. Beresford has lately been our fellow-guest at Klosters, which somehow, this season, has attracted many literary lights. It was Mr. Beresford's first experience of big mountains, and he came with his thoughts preoccupied with the high Alps. He was in a way shocked to find no one in this busy sports-village paid any attention to them. They were, apparently, the unobtrusive background of the gay winter-life. But the next morning his view was modified. As it was a fine day, one could see a long procession of pilgrims slowly wending their way on skis through the deep snow to worship at the summits which he thought had been neglected.

A sports-village is an excellent place in which to learn all sorts of things about photography. There are, of course, swarms of snapshooters with no ambition beyond pressing the button, and firmly convinced that an expensive camera will do the rest. There must be some occult influence at work which enables them to view their results as masterpieces. There are others, not so numerous, who have serious aims, pictorial, topographical, and even scientific. They give just as much thought to making a sporting-group as when exposing on some difficult subject. Among this class may be mentioned that veteran pictorial and press-photographer, Mr. Ward Muir—who, heavily equipped with cameras, skis and toboggan and, most important of all, his wife, who acts as model in his Alpine pictures, tobogganed down from Davos today. Both Mr. and Mrs. Muir are expert tobogganers, and so, when a good background presents itself, they pull up and get deep in photography. But even so expert a worker as Mr. Muir can be defeated by climatic conditions. At the start, the sun was shining and there was promise of a rich crop of pictures all down the famous Laret Run. But, alas! he arrived at Klosters without exposing a plate; for the sun went in and all the beautiful snow-effects were reduced to flat, gray scenes that would not photograph.

Art Wins

"Oh, I just love art," said the soulful maid,
And she heaved a soulful sigh.
"Art who?" asked the flapper. "I don't believe
I have ever met the guy."—*Harlow's Weekly.*

RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER

THE following are patents which are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker of Whitaker Building, Washington, D.C., from whom copies of any one of the patents may be obtained by sending twenty cents in stamps. The patents mentioned below were issued during the month of February from the United States Patent Office, the last issues of which have been disclosed to the public.

William B. Westcott of Wellesley, Mass., has been granted a patent on an Apparatus for Treating Kinematographic Films, number 1,444,818.

A Photographic Printing-Device has been patented by Thomas Carroll of Philadelphia, Pa., patent, number 1,445,987.

Isidor Kitsee of Philadelphia, Pa., has invented a Multicolor Screen for Photography, patent, number 1,446,049.

A Shutter Lock for Cameras has been invented by James Kalanzis of Chattanooga, Tenn., patent, number 1,446,186.

Louis Steinberger of Brooklyn, N.Y., has patented a new Photographic Developing-Tray, patent, number 1,444,435.

Manufacture of Light Copy-Paper has been patented by Gustav Karlsruhe and Heinrich Neuenhaus of Biebrich, Germany, patent, number 1,444,470.

Charles E. Griffiths of Wellington, New Zealand, has received number 1,444,682, on a patent for a Film Winder for Film Cameras.

Let Us Help The American Library Association

The Executive Board of the American Library Association appeals to American libraries and librarians to solicit books from the public and to send books from their duplicate collections for use *in* the American Library in Paris, and for use *by* the American Library in Paris and by the American Library Association in meeting the requests for American publications which come from other countries in Europe.

The present status of foreign exchange makes the purchase of American publications by the countries mentioned practically impossible. If Europeans are to be kept in touch with what America is doing, their libraries must be provided with American books, for a time at least, free of charge.

Almost any kind of books about America of comparatively recent date and in good condition will be acceptable. In many cases an edition other than the latest will be satisfactory. Encyclopedias, American History, Travel, Biography, Economics, Education, Politics, Sociology, Municipal Government, Science, Technology and Literature are desired. Children's books of the very best kind will not be out of place.

It is suggested that every library that receives this letter appoint a small committee—which may or may not be made up of library staff members—to solicit contributions either in a wholesale fashion or from selected individuals in the community; that such books as are available among the library's duplicates be withdrawn for this purpose and set aside with the *suitable* books received from the public; that you notify the Secretary of the American Library Association at 78 East Washington Street, Chicago, before May 1, the number of books which you have available for shipment. Shipping-instructions will then be sent to you.

Yours very truly,

W. W. BISHOP,
Librarian, University of Michigan.
Chairman, Committee of Library
Co-operation with other Countries.

PHOTO-ERA MAGAZINE is trying to do its part and we are confident that its readers will co-operate promptly and gladly.—EDITOR.

New Journal of the Camera Club, London

WE have received and read with interest the first issue (February, 1923) of the new series of *The Journal*, published by and in the interests of the Camera Club, 17 John Street, Adelphi, London, W. C. 2, England. The Rt. Hon. The Earl of Carnarvon is president.

Among those who contributed papers to this initial number we find Chapman Jones, F.I.C., F.C.S., Bertram Cox, F.R.P.S., Ward Muir and, most interesting of all, a report of the Earl of Carnarvon's personal account to the club of the discovery of Tut-Ankh-Amen's tomb, prepared by D. MacAlister. *The Journal* is well worth reading and we anticipate the arrival of future numbers.

Breck Whittemore Hodges

OUR valued contributor, Frederick B. Hodges, has sent us an artistic, personally decorated card, bearing the following significant message:

"One more flower in the garden of life,
To Frederick B. Hodges and Alzuma, his wife.
February eighteen, nineteen twenty-three:
Breck Whittemore, their dear baby, wee."

Our heartiest congratulations!

WILFRED A. FRENCH.
A. H. BEARDSLEY.

Photographing Fire-Flies and Glow-Worms

AMERICAN scientific papers contain details of some interesting photographic experiments made by Dr. Herbert E. Ives, of Philadelphia, for the purpose of testing the illuminating power of fire-flies and glow-worms. Panchromatic plates were used for most of the experiments and exposures of one hour given. The insects, it appears, give a "flash" of about .004 candle-power, but the color of the light given out is very different from ordinary illuminants; it is practically a monochromatic yellow-green. The complete paper, fully illustrated, may be found in No. 1,160 (Vol. 194, No. 2) of the "Journal of the Franklin Institute."